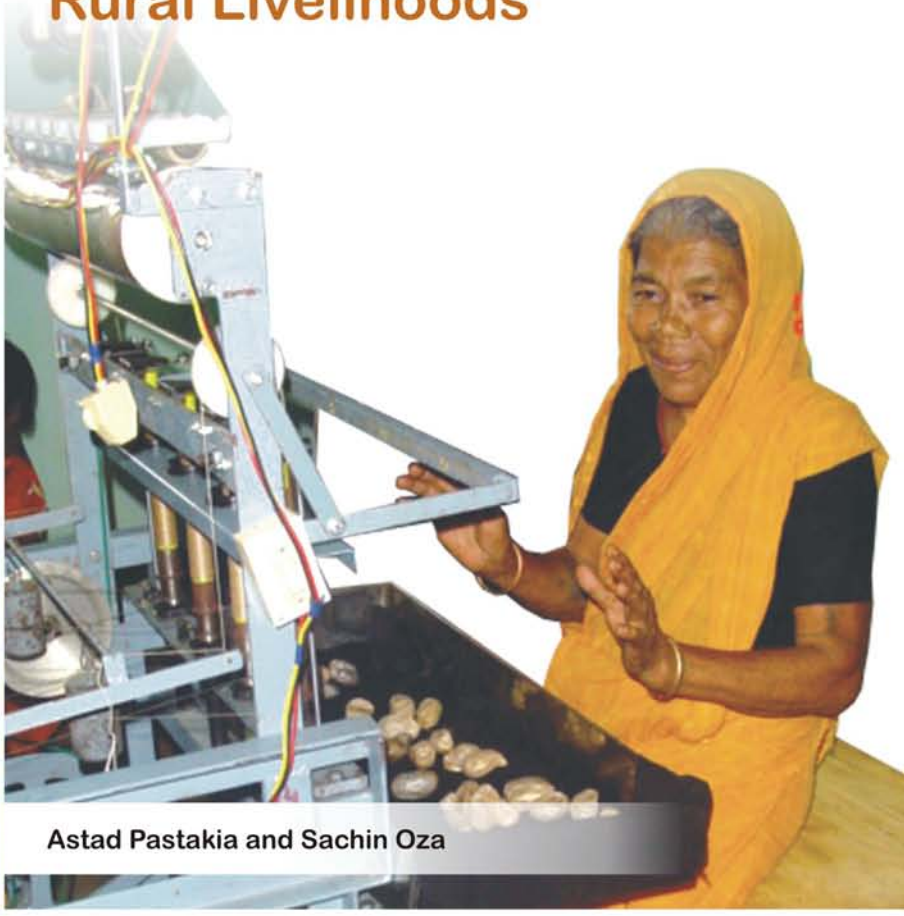
A Strategy Handbook for the Practitioner

Livelihood Augmentation in Rainfed Areas

2

Entrepreneurial Strategies for Augmenting Rural Livelihoods



Astad Pastakia and Sachin Oza

dsc Development Support Centre

AGA KHAN FOUNDATION

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Livelihood Augmentation in Rainfed Areas

A Strategy Handbook for the Practitioner

Volume II

Entrepreneurial Strategies for Augmenting Rural Livelihoods

Astad Pastakia & Sachin Oza

Development Support Centre

Ahmedabad

Livelihood Augmentation in Rainfed Areas: A Strategy Handbook for the Practitioner

Volume II: Entrepreneurial Strategies for Augmenting Rural Livelihoods

Astad Pastakia & Sachin Oza

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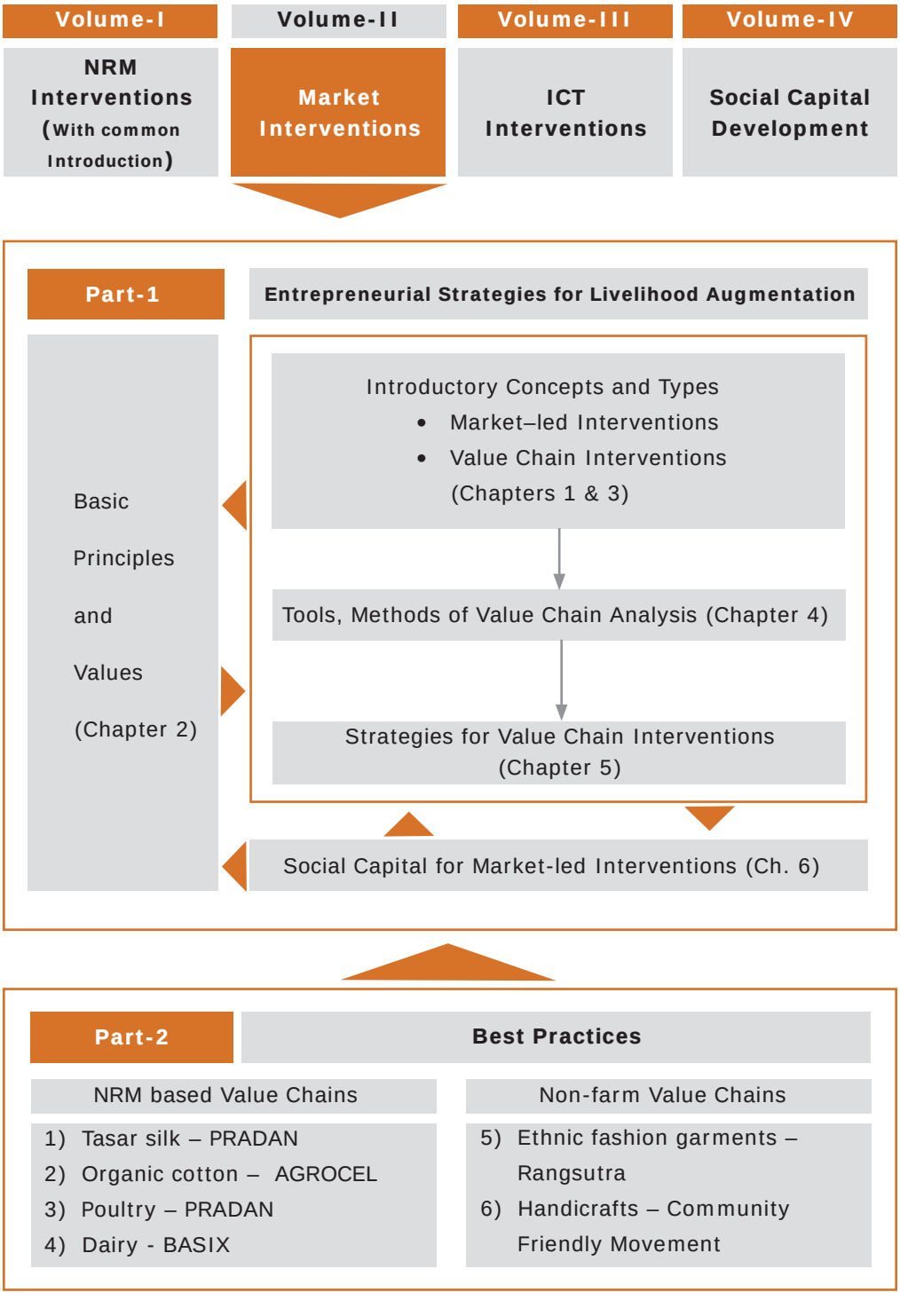
Navigation Chart



Foreword

Removal of poverty and hunger is the first of the eight Millennium Development Goals (MDGs) adopted by the United Nations. About 400 million rural poor reside in about 200 poorest districts of the country that constitute rainfed areas.

If one looks at the overall agricultural pattern across the country, almost 85 million ha, that is, about 60% of the 142 million ha of cultivable land is under rainfed conditions. These make a significant contribution to the production of pulses, oil seeds and cereals in the country. Public investment in irrigation has steadily declined. In addition, even if the entire irrigation potential of the country is developed, 50% of the arable land is likely to remain rainfed. There is, therefore, an urgent need to give attention to improving the agricultural productivity and diversifying the economy of these areas.

The government, research institutes, NGOs and the private sector, each in its own manner, has made efforts to enhance the livelihood opportunities for rural communities in rainfed areas. Prime Minister Dr. Manmohan Singh announced a mega assistance plan of Rs 25,000 crores in 2007 to boost agricultural productivity. A National Rainfed Area Authority has also been set up to specifically look into the issues of enhancing rural livelihoods in rainfed areas. The efforts of luminaries such as Shri P.R. Mishra of Sukhomajri Project in Haryana and Shri Anna Hazare in Ralegaon Siddhi, Maharashtra, are well known.

Development Support Centre (DSC) initiated in 1994 by the late Shri Anil Shah, has made a critical contribution in capacity building, research and influencing policies related to participatory natural resource management. The organization was involved in developing the first watershed guidelines brought out by Mr. B.N. Yugandhar, and continues to look at issues related to the effective implementation of the watershed programme. Some of the studies such as 'Longitudinal Study in Sixteen Drought Prone Watershed and Non-watershed Villages of Gujarat', 'Drinking Water Security in Watershed Villages' and 'Cost-benefit Analysis of Watershed Development: An Exploratory Study in Gujarat' have led to policy changes at the state and national levels and better practices at the ground level.

One of the most important contributions of Anilbhai was the formulation of principles for development and management of natural resources in a sustainable manner or 'Bopal Declarations' as they are popularly known. These have been mentioned in the Planning Commission's 'Approach Paper for Rainfed Areas' and also in the new watershed

guidelines of April 2008, as guiding principles for implementing the programme. The new guidelines give due recognition to the need for improving rural livelihoods through participatory watershed development, with the focus on integrated farming systems for enhancing income, productivity and livelihood security in a sustainable manner.

As an organization involved in capacity building of practitioners, and also working as an implementing agency, DSC realizes that there is no dearth of literature on watershed management. There are many how-to-do manuals such as how to construct a check-dam or how to mobilize people to form Self Help Groups, etc. However, there are few that focus on broadening the horizon of the practitioner, by providing alternative options that could be tried out in different conditions. Whereas plenty of literature is available on the technical aspects of watershed development and other livelihood strategies, not much has been written on the institutional aspects, entrepreneurial strategies or the role of ICT. Besides, there are many rainfed areas such as flat lands or coastal lands where the typical watershed approach cannot be applied and, therefore, intervention strategies for these areas also need to be developed.

A need, therefore, was felt for a strategy handbook that would focus on livelihood augmentation in rainfed areas, which would draw upon the experiences of field implementation, and cull out the principles and strategies to help a practitioner adapt these in his/her context. Given the breadth of the subject, the authors found it practical to present the material in four volumes.

Dr. Astad Pastakia, a doctorate from the Indian Institute of Management, Ahmedabad, and author of *Locked Horns – Conflicts and their Resolution in Community-based Natural Resource Management*, agreed to anchor the project. Mr. Sachin Oza, Executive Director, DSC and a practitioner for 20 years, has co-authored the volumes with Dr. Pastakia. They were ably assisted by Mr. Virendra Vaghani, who has coordinated the entire project.

The development of these handbooks has not been easy and it has taken well over three years to bring them out in the current form. I am grateful to Aga Khan Foundation and the European Commission for having shown great patience and trust and for extending support to DSC in this endeavour. Needless to say, these volumes would not have been possible without the inputs of several organizations that have been toiling night and day to enhance the livelihoods of the poor. I am sure, that these volumes will make a significant contribution and add tremendous value to the existing literature on rural livelihoods.

Vijay Mahajan

Chairman, Development Support Centre

Preface

With the Green Revolution areas showing signs of fatigue, and public investments in rainfed regions not yielding the desired results, Indian agriculture once again finds itself at the crossroads. The crisis of productivity in agriculture is linked to an impending crisis of food security, reminiscent of the PL-480 days, prior to the Green Revolution. Whereas agricultural growth rates have stagnated, the population is growing at exponential rates. The per capita production of food grains dropped from an all-time high of 207 kg/person/yr in 1995 to 186 kg/person/yr in 2007. The per capita availability of agricultural land has declined from 0.48 ha in 1951 to 0.16 ha in 1991 and is likely to decline further to 0.08 ha by 2035. Looking at the magnitude of the problem and heeding the advice of the Planning Commission, the Prime Minister, Dr. Manmohan Singh, announced in 2007 a mega assistance plan of Rs 25,000 crores to state governments to boost agricultural productivity. However, whether these investments will produce the desired results will depend on how and where these resources are deployed.

It is our contention that a vast untapped potential exists in rainfed areas of the country. this has also been corroborated by a recent comprehensive assessment made by a team of international agricultural scientists (Wani, Rockstrom and Oweis, 2009). The keys to unlock this potential are also available, as demonstrated by the efforts of numerous non-governmental and governmental initiatives in the rainfed areas. However, the knowledge of what strategy works in what kind of situations remains diffused and often undocumented. The need of the hour is to consolidate this knowledge and extract principles and strategies that can be applied in similar situations elsewhere. It is precisely this exercise that led to the development of this handbook.

Although the initial idea was to focus on watershed development, the project widened its scope through an iterative process of search and reflection. The advisory committee of the project suggested broadening the scope to include other strategies being followed in rainfed areas, where watershed development cannot be applied, for instance, in flat lands and in regions with problems of saline and alkaline soils, laterite soils, etc. The committee also recommended focusing on livelihood augmentation, which is the ultimate objective of watershed development and other natural resource management (NRM) interventions. Market interventions came as a natural extension of post-watershed development. However, many market interventions, especially in the non-farm sector, were also ‘discovered’. These were initiated from scratch by social entrepreneurs and business houses with a social conscience. The need to consolidate

the knowledge about building human and social capital was evident to the editorial team right from the beginning. Most of the watershed manuals reviewed did not do justice to this theme, given the overriding importance of placing people in the centre of all developmental projects and processes. Another issue that was added at a later stage was the role of Information and Communication Technology (ICT) in augmenting livelihoods in the service sector as well as other livelihood interventions. It was soon realized that the team would not be able to do justice to all these issues within the stipulated pages of the volume. In consultation with the Aga Khan Foundation (India), which is supporting the project, it was, therefore, decided to bring out the handbook in four, stand-alone volumes, each covering a particular theme.

The compiling of information and experiences was pursued through multiple routes such as workshops and personal interviews of practitioners, literature reviews, and the Internet. Wherever cases were readily available, the information was updated and then included. Wherever interesting experiences were found but not documented, the authours took upon themselves to document these. As a result of this process of 'muddling through' and also in view of the expanded scope of the handbook, the project took much longer to complete. Progress was often painfully slow because the team depended on various actors to provide information and updates. Nevertheless, the journey has been an enriching one. The authours comprised a practitioner and an academic; this helped to keep the balance between theory and practice. The readability of the manuscript for the practitioner at the programme/project level, for whom the handbook is primarily designed, was under constant review.

Unlocking the potential of rainfed areas needs a conducive policy environment. There are indications to show that the policy for the development of rainfed areas is gradually moving in the right direction.

The National Commission on Farmers (2005) recommended a paradigm shift in the approach and implementation of watershed programmes in the country, and this has remianed the main plank for developing rainfed areas in an integrated manner. The Commission advocated partnerships among public sector, private sector, NGOs, and farmers, particularly the landless and women, through collective action and institutional mechanisms. It proposed a five-point action plan comprising:

i. Improving soil health to increase productivity.

ii. Promoting water harvesting, water conservation, and sustainable and equitable use of water.

iii. Ensuring access to affordable credit for crop and life insurance.

iv. Developing and disseminating appropriate technologies.

v. Improving opportunities, infrastructure, and regulations for marketing.

Taking cognizance of the above recommendations, the National Rainfed Area Authority (NRAA) was set up in November 2006, to focus on these areas. The main responsibilities of the NRAA have been identified as follows:

- Supporting the process of preparing strategic plans for watershed-based development projects at the state and district levels keeping in view specific agro-climatic and socio-economic conditions.
- Assisting in the preparation of state-specific technical manuals.
- Supporting state-level nodal agencies to identify resource organizations, and establishing capacity building arrangements.
- Facilitating action research relevant to watershed development programmes in different agro-climatic regions.
- Conducting evaluation, impact assessment, and thematic studies for improving the quality of watershed projects.
- Facilitating the convergence of different schemes and projects of the Government of India.
- Accessing additional funds from other sources, including private sector and foreign funding agencies to fill up critical gaps in the programme.
- Scaling up successful experiences through innovative organizations at the field level.

Subsequently, Common Guidelines for Watershed Development Projects (2008) were developed to provide a fresh framework for the next generation watershed programmes. The guidelines sought to bring about a unified perspective across all ministries. Unlike previous watershed guidelines, these gave priority to creating livelihood opportunities, productivity enhancement and conservation measures. The focus was on promoting farming and allied activities to promote local livelihoods while ensuring resource conservation and regeneration. The hope was, the new approach would systematically integrate livestock and fisheries management as a central intervention, and encourage dairy and marketing of dairy products. The project duration has been further enhanced to seven years and the financial allocation has been increased from Rs 6000/ha to Rs 12000/ha. The Guidelines emphasize equity and gender sensitivity, decentralization, need for committed and competent facilitating agencies, centrality of community participation,

capacity building and technology inputs, regular monitoring, evaluation and learning, and above all, establishing appropriate technical and professional support structures at the national, state, district, and project levels.

Having brought out the Common Guidelines, the challenge for policy makers and practitioners alike will be to see how best these can be executed. Considerable experience has been gained since the implementation of the Watershed Guidelines of 1995. Significant work has been carried out in the field of participatory NRM, rural entrepreneurship development, use of ICT, and institution development. These experiences are documented here to broaden the vision of the practitioner and provide him/her with insights into the *principles, strategies* and *best practices*. We hope that this will go a long way in stimulating and strategizing action while providing key insights for practitioners, policy makers, and researchers.

Some of the cases provided are useful for conducting training programmes. With the passage of time, the cases may become dated; however, the principles and strategies gleaned from them are likely to remain valid until such time that new knowledge is generated from new experiences in the field. It is our fond hope that this compilation will stimulate more action in the field, leading to the unlocking of the vast hidden potential of rainfed areas and the generation of new livelihood avenues for millions of poor in the country.

Astad Pastakia
Sachin Oza

Acknowledgement

Development Support Centre (DSC) has been working in the field of participatory natural resource management since 1994. As an organization involved in capacity building and support services, DSC found that there was a need for a comprehensive strategy handbook that looks at various aspects of livelihood augmentation in rainfed areas (LARA), viz., natural resource management, institution building, entrepreneurship, and the use of information and communication technology (ICT). These four volumes of the LARA handbook represent the culmination of two years of continuous efforts, to which many professionals and voluntary agencies from all over the country have contributed.

An advisory committee guided the project from the beginning. We wish to thank this group comprising Mr. Apoorva Oza, Dr. Sudershan Iyengar, Dr. R. Parthasarthy, Mr. Suneel Padale, and Dr. Indira Hirway for their guidance and encouragement throughout the project. Special thanks to Ms Tinni Sawhney, Mr. Somnath Bandopadhyay, Mr. Suneel Padale and Mr. Vivek Singh of Aga Khan Foundation, India, for their continuous encouragement, guidance and support during the entire process of developing and publishing the handbook.

We are grateful to reviewers of each volume for providing valuable feedback and comments. We are also thankful to professionals from various organizations, who have contributed the case studies, and have given their feedback and suggestions to enrich the handbook. We are equally grateful to the practitioners, who participated in various workshops organized during the course of the project, for volunteering their time, and sharing their valuable insights and experiences.

A large number of organizations extended their support to this initiative by sending representatives to meetings/workshops, and providing information and reports, writing case studies, etc. We would like to thank in particular the leadership and representatives of AGROCEL, AKRSP, ANANDI, APMAS, ARAVALI, ASA, BAIF, BASIX, Community Friendly Movement, Development Alternatives, Ekgaon, FES, IRMA, Jalbhagirathi Foundation, KMVS, MSSRF, MYRADA, N.M. Sadguru Foundation, PRADAN, RANGSUTRA, , Seva Mandir, Source for Change, TCS, The Livelihood School, Utthan, VRTI, and WASSAN among others.

We are thankful to Mr. Vijay Mahajan, Chairman, DSC, for his encouragement and for agreeing to write the foreword. Last but not the least, the handbook would not have been possible without the enthusiasm and unstinting support of the DSC team.

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Abbreviations

ADB	Asian Development Bank
AGM	Annual General Meeting
AI	Artificial Insemination
AKRSP	Aga Khan Rural Support Programme (India)
AMFPL	Artisans Micro Finance Pvt. Ltd
ANT	Action Northeast Trust
APDDCF	Andhra Pradesh Dairy Development Cooperative Federation
ASA	Action for Social Advancement
ASCs	Agricultural Service Centres
ASD	Agriculture Service Division
BAIF	Bhartiya Agro-industries Foundation
BASIX	Bhartiya Samruddhi Investments and Consulting Services Limited (BASICS)
BCU	Bulk cooling unit
BDS	Business Development Services
BPOs	Business Process Outsourcing
CBOs	Community-based Organizations
CFM	Community Friendly Movement
CIGs	Common Interest Groups
CII	Confederation of Indian Industries
CIRAD	French Agricultural Research Centre for International Development for the Tropics and Subtropics
CLRI	Central Leather Research Institute
CSB	Central Silk Board
CTLC	Community Technology Learning Centre
DFID	Department for International Development
DFLs	Disease-free Layings
DPAP	Drought-prone Areas Programme
DPIP	District Poverty Initiatives Programme
DRDA	District Rural Development Agency
DSC	Development Support Centre
EAPs	Externally Aided Projects
FKCCI	Federation of Karnataka Chamber of Commerce and Industry

FPC	Farmer Producer Companies
GDP	Gross Domestic Product
GoAP	Government of Andhra Pradesh
GoI	Government of India
GROFED	Oilseed Growers Federation
GVT	Gramin Vikas Trust
HVLM	High Volume Low Margin
ICAR	Indian Council for Agriculture Research
ICICI	Industrial Credit and Investment Corporation of India
ICRISAT	International Crops Research Institute for Semi-arid Tropics
ICT	Information and Communication Technology
IFAD	International Fund for Agricultural Development
IFFCO	Indian Farmers Fertiliser Cooperative Limited
IIMA	Indian Institute of Management, Ahmedabad
IKSL	IFFCO Kisan Sanchar Ltd.
InNaTex	International Fair of Natural and Organic Textiles
INRA	Institut National de Recherche Agronomique Research (French)
IPM	Integrated Pest Management
IWDP	Integrated Waste Land Development
KVIC	Khadi and Village Industries Commission
LPD	Litres Per Day
LVHM	Low Volume, High Margin
M&S	Marks & Spencer
MACTS	Mutually Aided Cooperative and Thrift Society (Act)
MANAGE	National Institute of Agricultural Extension Management
MBTs	Mutual Benefit Trusts
MCPs	Milk Chilling Plants
MCX	Multi Commodity Exchange
MIS	Management Information System
MoRD	Ministry of Rural Development
MPCS	Milk Producers' Cooperative Societies
MPEDA	Marine Products Exports Development Agency
MSSRF	M.S. Swaminathan Research Foundation
NABARD	National Bank for Agriculture and Rural Development
NAEP	National Afforestation and Eco-development Project
NAFED	National Agricultural Cooperative Marketing Federation
NGOs	Non-Government Organization

NID	National Institute of Design
NIFT	National Institute of Fashion Technology
NLDP	National Leather Development Programme
NRAA	National Rainfed Area Authority
NRD	Natural Resource Development
NRM	Natural Resource Management
NSEAP	National Spot Exchange for Agriculture Produce
NTFPs	Non-Timber Forest Products
NWDPRA	National Watershed Development Project for Rainfed Areas
OTELP	Orissa Tribal Empowerment and Livelihoods Programme
PI	People's Institution
PPB	Participatory Plant Breeding
PRADAN	Professional Assistance for Development Action
PVSP	Participatory Varietal Selection and Promotion
RVP & FPR	River Valley Project and Flood-prone Rivers
SEZ	Special Economic Zones
SGM	Simplified Gross Margin
SGSY	Swarnjayanti Gram Swarozgar Yojana
SHG	Self Help Group
SNF	Solid Not Fat
SRCs	Supply Region Companies
SRISTI	Society for Research and Initiatives for Sustainable Technologies and Institutions
STP	Segmentation, Targeting, Positioning
TAC	ToeHold Artisans Collaborative
TERI	The Energy and Resources Institute
UNDP	United Nations Development Programme
URMUL	Uttari Rajasthan Milk Union Ltd.
VCIs	Value Chain Interventions
Vericott	Vertical Integration in Cotton
VRTI	Vivekananda Research & Training Institute
VSAT	Very Small Aperture Terminal Technology
WDF	Watershed Development Fund
WDPs	Watershed Development Programmes
WDPSCA	Watershed Development Programme for Shifting Cultivation Areas
WTO	World Trade Organization

Conceptual Framework

Our understanding of Livelihood Augmentation (LA) is derived from the overall objectives of development, which have, over the years, come to mean 'growth with social equity and stability'. The notion of 'sustainability' has been included as an equally important goal in the wake of the environmental movement. The idea of equality includes elimination of discrimination on the lines of caste, class, gender, and other social considerations. Hence, LA must lead to the following key outcomes:

i. Increased income of households in target areas / communities

ii. Diversified sources of income for the household

iii. Reduced vulnerability to production and market risks

iv. Increased carrying capacity of the watershed or unit area of land as a result of the above

v. Increased equity and empowerment of the poor and marginalized

vi. Increased participation and empowerment of women

vii. Sustainable use of natural resources

viii. Increased resilience of natural resources and communities to cope with changes in future, including those due to climate change

Figure 1 provides a framework showing how different groups of strategies work towards this common goal of livelihood augmentation in rainfed areas (LARA) viz.:

a) Natural resource management strategies

b) Entrepreneurial strategies

c) Information and communication strategies

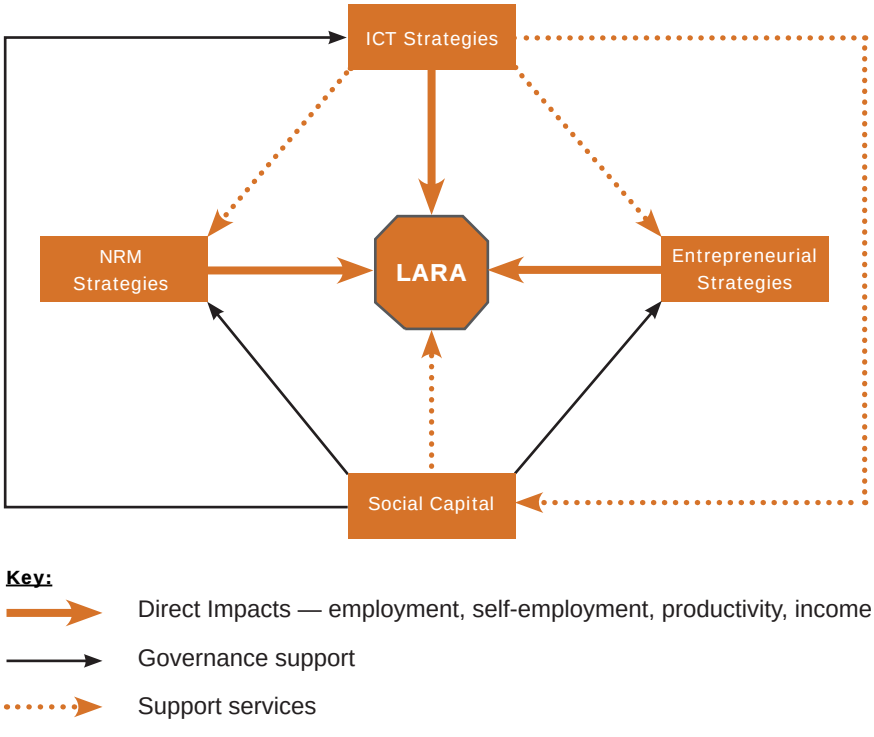
d) Social capital development strategies

Natural Resource Management (NRM) Strategies

Both historically and logically, approaches that make investments in conservation and sustainable use of natural resources are the most prevalent and serve as the starting point. The net effect of NRM interventions is to increase productivity leading to better income as well as enhanced quality of life for rural households. NRM strategies could

be built around conservation of land, water, and biomass. It would lead to increased productivity of agriculture, forests, pasture lands, livestock, and even non-farm activities dependent on these or other natural resources — such as weaving, fabric making, toy making, embroidery, etc.

Figure 1: Framework for Livelihood Augmentation



Entrepreneurial Strategies

Today helping farmers and rural artisans to secure remunerative prices have spawned a number of market interventions. In some cases, accessing distant markets has been facilitated through the process of collectivization and value addition. In other cases, social entrepreneurs themselves have worked backwards from the markets to build value chains that benefit poor artisans and primary producers. Market interventions lead to value addition and enable the primary producer to get his/her rightful share in the terminal price of the value chain.

Information and Communication Technology (ICT) Strategies

Recent developments in the ICT sector has made it possible to open up new vistas in the service sector in rural areas. Examples include the emergence of rural BPOs and information kiosks that provide a host of e-services to farmers and other villagers. However, ICT is not just about the service sector. Its applications are so widespread that ICT has emerged as a cross-cutting force, helping to improve efficiency of all kinds of development interventions through a variety of support services. ICT provides new tools like Remote Sensing and Geographic Information Systems to enable better planning and monitoring of NRM interventions. It has made it possible to provide farmers in remote villages with farm specific agri-advisories of highly qualified agricultural experts. It has stimulated the self-help and self-employment movement through access to information and knowledge via village kiosks. It has also enabled farmers, traders and nano-entrepreneurs to benefit from access to market intelligence and alternative markets. Lastly, ICT applications have the potential to make government delivery systems more transparent and accountable by placing knowledge and information in the hands of the users.

ICT interventions have worked wherever these have effectively addressed the felt needs of the rural population, and helped cut transaction costs for both the service provider as well as the rural customer.

Social Capital

The above interventions can become effective and sustainable only when the local communities are in charge of the development process. Over the past two decades, NGOs have successfully evolved participative tools and techniques for facilitating developmental processes and building social capital. This includes building the capacities of local communities through exposure, training and skill building, and facilitating the emergence of People's Institutions (PIs), also known as community based organisations (CBOs). PIs serve the purpose of self-governance and collective decision-making with egalitarian values such as democracy, unity, equity, gender sensitivity, and ecofriendliness. These institutions also help bring out the collective strength of marginal and scattered producers in negotiating and/or partnering with external agencies, including markets, financial institutions, technology providers, and the government.

In the process, PIs become training grounds for developing community leaders and in empowering marginal producers. Hence, social capital development can be seen both as a means as well as an end of the development process.

Organization of the Handbook

This handbook is organised in four volumes.

i. **Volume I** deals with experiences of improving livelihoods through investments in the natural resource base. This includes both watershed development initiatives as well as specialized NRM interventions for areas where watershed development may not be possible or even relevant.

ii. **Volume II** provides experiences of augmenting livelihoods through market-led interventions, including interventions that address market imperfections and those that seek to tap or create market opportunities. Strategies for value-chain interventions are discussed as a special case of market-led interventions. These seek to augment livelihoods of the poor and marginalized through interventions at different nodes of the value chain by forming strategic alliances with different stakeholders/players in the chain.

iii. **Volume III** puts together the knowledge gleaned from innovative approaches to augment rural livelihoods through the use of ICT. ICT helps to augment livelihoods, especially of the educated youth by creating new opportunities in the service sector. Although ICT applications encompass all aspects of rural life, we have focused more on those that enable creation of human capital and livelihood augmentation.

iv. **Volume IV** dwells upon the difficult task of facilitating the creation of PIs and building the capacity of rural women and men, to implement livelihood projects. PIs help to oversee the maintenance of common assets after the completion of the project.

How to Use the Handbook

*"I used to think I was **poor**. Then they told me I wasn't poor, I was **needy**. Then they said needy was an expression that is self defeating, I was actually **deprived**. Then again they said deprived created a bad image, I was actually **underprivileged**. Now they say underprivileged is inaccurate. I am actually **disadvantaged**. I still don't have a dime, but I sure have a rich vocabulary!"*

– Jules Feitter

Development academics are known for their penchant for creating jargon where there is need for none, points out Pulitzer-Prize and Oscar-winning cartoonist and novelist Jules Feitter in his inimitable style. This may be one of the reasons that puts off the practitioner from reading academic literature, which otherwise may have useful content. The authors were painfully aware of this limitation when attempting to write this handbook. One self-correcting mechanism was to have a team of writers—one a practitioner, the other an academic. Efforts were also made to persuade (or cajole!) practitioners to take a look at the draft volumes and give their reactions. Despite our best efforts to make the volumes reader-friendly, we may have not succeeded completely, especially where we have drawn upon existing theoretical frameworks. To overcome this difficulty, we have provided a glossary of technical terms at the end of each of the four volumes.

Whereas the handbook is largely written to serve as reference material for the practitioner, it may serve other purposes as well. We believe there will be four categories of readers for this handbook.

a. The largest category comprises the practitioners, who may like to use it as a reference book.

b. The academics-oriented practitioners and/or researchers wanting to get a more complete understanding of one or more of the four themes presented in the handbook constitute the second group. Admittedly, this group will be much smaller.

c. A small minority may comprise individuals, who will not be satisfied with just one or two themes but will want to read the entire handbook in order to get a holistic understanding of the problems and opportunities of promoting livelihoods in rainfed areas.

d. We expect that training and support agencies will find this handbook useful from the training perspective. The handbook provides a large number of case studies, some of which have been already tested as training material.

Structure of the Handbook

For all categories of readers, it is necessary to understand how the series and the book are structured.

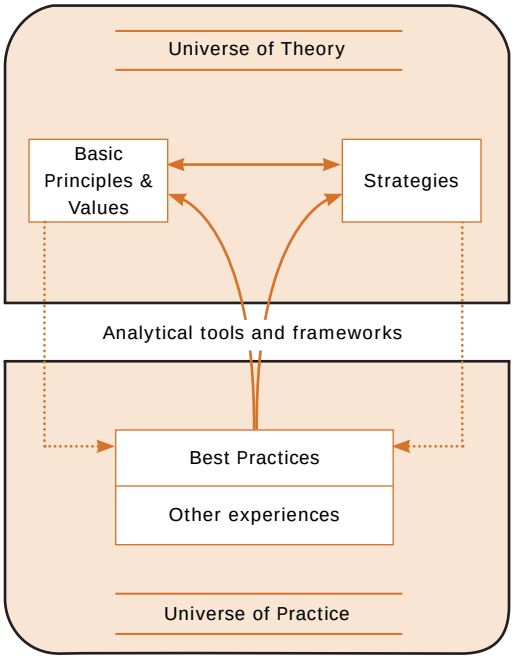
Broad structure

There are four volumes under a common framework. The first part of Volume 1 has a detailed introduction, which is common to all the volumes. Barring this, each volume stands alone.

Each volume comprises a) selected case studies of *best practices*, b) articulation of *basic principles and ethical values* and *c)* description of *strategies*. It also provides an understanding of why particular strategies work better in particular situations. The basic principles and strategies are derived from analyses of the case studies and other experiences and represent the transition from practice to theory (Figure 1). The feedback loop shows that the strategies presented may stimulate more action, leading to new best practices. Depending on one's orientation, the reader can start from practice and end up with theory, or vice versa. Analytical tools and frameworks used to understand strategies are included in the theory section. Human interest stories and checklists of various types are presented as Box items.

Additional information has been provided in the Annexures, keeping in mind the need of the practitioner. The annexures of each volume includes a *glossary of technical terms*, a *resource guide* and a guide to key *resource institutions*. The Resource Guide is in the form of an annotated bibliography of other guide books and references that a practitioner may find useful to pursue a particular strategy. Several of these are in the nature of 'how-to-do' books, covering related sectors and providing technical information, beyond the purview of this handbook. A guide to Key Resource Institutions, with contact details and short descriptions of their important projects/programmes, is also included.

Figure 1: Structure of Each Volume



Volume-specific structure

Each volume can be read as a stand-alone. It is, however, best read in conjunction with the other volumes for a more holistic understanding of the livelihood augmentation processes. The structure of the presentation varies somewhat from volume to volume, depending on the nature of content. A *navigation chart* presented at the beginning brings out the connections between different parts and chapters of the volume. The *index* at the end of each volume will help the reader to locate matter of his/her particular interest with relative ease.

Part-1

Entrepreneurial Strategies for Livelihood Augmentation

1 Entrepreneurial Strategies for Livelihood Augmentation

Introduction[1]

Entrepreneurial strategies are designed to increase livelihood opportunities for primary producers by either creating new opportunities for employment and self-employment, or providing marketing support to existing livelihoods on a significant scale. These strategies often involve aggregation of produce or aggregation of demand for inputs in order to collectively deal with markets. Institutional strategies to deal with the markets could include establishment of community-based organizations (CBOs) or private organizations with social goals.

This volume describes various market-led interventions that aim to create new livelihood opportunities for the rural poor or to improve price realization by addressing market imperfections that adversely affect the marginal farmer. Value chain interventions (VCIs) are seen as a special case of market-led interventions. Such interventions have greater potential for livelihood augmentation; at the same time, these demand effort and commitment over a long duration on the part of the facilitating agency. Various strategies for VCIs are discussed, based on the real experiences of developmental agencies.

Entrepreneurial strategies also include providing training in entrepreneurship to rural youth, women, etc., to enable them to either set up their own enterprises or to take up self-employment. With the advent of ICT, this approach has found new impetus because it can be taken up on a large scale. This strategy is however not included in this volume as it is discussed in Volume III of the series.

Market-led Interventions

There is a growing interest within the NGO community to initiate market-led interventions. Some of the key drivers are:

- Increasing pressure of population on land, leading to fragmentation and un-economical land holdings.
- Growing realization that there is a limit to increase in productivity of the available land through new technology, etc.
- Possibilitiy of new opportunities for marketing farm produce to distant markets

as a result of globalisation of the economy and growth in ICT.

- Increasing opportunities to link consumers and producers, who share the same values such as fair trade, conservation of environment, and preservation of culture by patronizing traditional arts and artisans.
- Maturing of the Self-Help Group (SHG) movement, wherein a large number of SHGs are attempting to move beyond the realms of savings and credit to the exciting world of micro-enterprise.

Although many developmental agencies have tried to provide marketing support to local producers, there have been more instances of failure than success. These agencies have realized that the skill-sets needed to dabble in markets are very different from the ones they possess. Since markets are unforgiving, the mistakes made by a novice can prove very costly, especially when it involves the livelihoods of a large number of poor people. Hence, it becomes imperative to study the successful cases, draw lessons and extract basic principles, that can guide developmental agencies. This is precisely what we have attempted to do through this volume.

Rationale of Market-led Interventions

Successful NRM strategies such as watershed development, and introduction of new agricultural technologies and varieties lead to increase in productivity. In rainfed areas, this means moving from a situation of subsistence farming to surplus farming. The farmer now has marketable surplus, which he/she disposes to the local broker in order to get cash income, which can be used for various productive and consumptive needs. In the fields that have assured irrigation, the farmer may shift to cash crops such as hybrid cotton, sugarcane and cumin in order to make his/her farming more profitable.

However if a farmer does not have the financial capacity to hold the produce for long. he/she may be forced to sell it at the prevailing price either in the village or at the nearest market. He/she then has little bargaining power and has perforce to sell the produce at the price offered by the merchants on the given day. Taking advantage of their vulnerability, merchants tend to exploit small and marginal farmers, and earn disproportionate income for the services they provide in the supply chain.

In the case of cash crops such as cotton, the primary produce goes through a number of processing steps, namely, ginning, spinning, weaving, tailoring etc. before the end product — in this case a garment — is produced. At each stage, value is added through processing. Value is also added between processing steps when the raw material is cleaned, graded, packed and transported to the next destination of processing. Various entrepreneurs, traders, and middlemen, who together form the supply chain, perform all these functions. The share of the primary producer in the terminal price is often

disproportionately small. This calls for a market intervention to remedy the situation. It also represents an opportunity for raising the income levels of farmers with the same level of primary production and, thereby, increasing the carrying capacity of the land.

Interventions that seek to increase the price realized by the farmers may be termed as market-led interventions. Different pathways have been adopted to reach this end:

a) Understanding market opportunities better and adopting appropriate strategies to tap these opportunities. Specific activities may include market-directed production and better marketing, through cleaning, grading, storing, aggregation of produce, processing, branding, etc.
b) Creating new markets through consumer education and supply of new applications (goods and services) that meet the existing or latent needs of consumers.
c) Addressing market imperfections that work against the small and marginal rural producer. Specific activities may include providing market intelligence, market education and awareness, influencing local markets, creating market infrastructure, etc.

These new functions and activities generate new sources of livelihood and employment for the local people and may be carried out either through community-based organizations, private companies, not-for-profit institutions, nano-entrepreneurs, service providers, or a combination of these. In the long run, some of these institutions may become large enough to start controlling the value chain. Indeed many strategies have been deployed, which look at the entire supply chain before determining the points of intervention. The yardsticks for successful market-led interventions are:

- Generation of a large number of livelihoods at the primary and subsequent stages of the value chain
- Empowerment of the people through creation of local institutions that gradually take up more and more functions of the value chain.
- Greater share in the price spread and margins for local producers and their institutions.
- Insulation of primary producers from market and production risks.

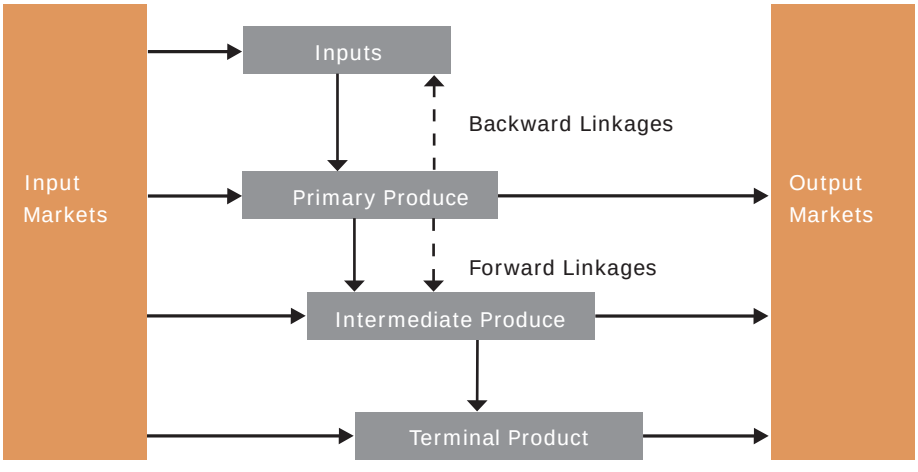
Successful application of these yardticks would lead to better family economics and better carrying capacity of the land.

Scope for Intervention

Figure 1.1 provides a schematic diagram of the pathways of value addition, starting

from the primary sector at the village level. The primary produce may be sold directly in the market or it may be processed through one or more stages. At each stage of production, the producer has to interact with the market either to procure equipment and inputs for production, or to sell his/her produce. Each one of the strands/pathways offers scope for intervention.

Figure 1.1: Scope for Intervention

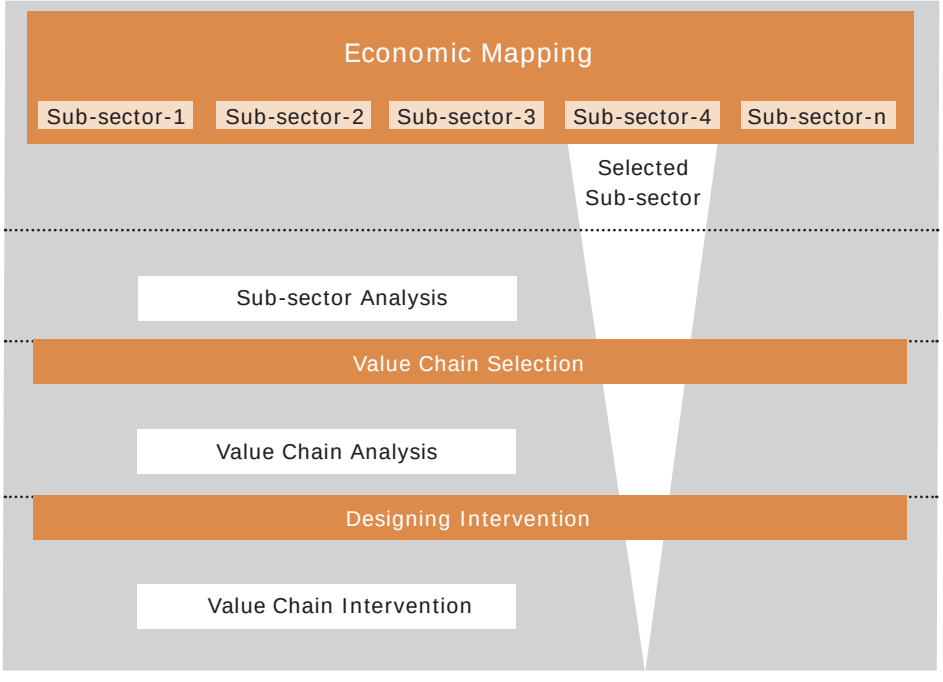


As the figure shows, the scope for market-led intervention exists through both forward and backward routes. VCI would include the entire chain from inputs to terminal product.

Key Concepts[2]

A few key concepts need to be clarified before moving on to basic principles and strategies. Given a target area, a social entrepreneur interested in designing a VCI, will need first to look at the state of the existing local economy. From an overview of the local economy, the analysis must funnel down to the specific value chain/supply chain in which an intervention has to be made. Development literature has evolved specific terminology to describe the analysis carried out at different levels of the economy as shown in Figure 1.2.

Figure 1.2: Analyses Preceding Design of VCIs



Source: Adapted from Hans Posthumus Consultancy (2007)

Economic mapping

The local economy is made up of a collection of sub-sectors. Economic mapping involves identifying the key sub-sectors. The social entrepreneur will have to select a sub-sector that has the maximum potential for generating livelihoods for the poor, where he/she can make a difference, given the strengths of his/her institution.

Sub-sector analyses

A sub-sector is defined as an aggregation of alternative marketing channels (including supply chains and value chains) for one or a group of closely related products. The final product or a key raw material can be used to delineate a sub-sector. Here, marketing channel is defined as any traceable path through a production or distribution system of product transformation.

Sub-sector analyses usually involves mapping of the cluster of alternative marketing channels (supply chains and or value chains) related to the particular product (for example, ready-made garments),or raw material (for example, organic cotton). Mapping of a sub-sector is almost co-terminus with mapping of a value chain since a value chain can only be understood in the context of the other marketing channels in

the sub-sector. Details of how to map a value chain are provided in Chapter 4.

Value chain analysis

The concept of a value chain has evolved quite a bit since it was first developed in the '60s by Institut National de Recherche Agronomique Research (INRA) and French Agricultural Research Centre for International Development for the Tropics and Subtropics (CIRAD) for analyzing marketing chains of agricultural commodities. At that time, no attempt had been to made at develop a unified theoretical approach. It was only in the early 80s that Michael Porter brought attention to value chain analysis (VCA) as a tool to develop, understand, and augment the competitive advantage of a manufacturing unit in a given sub-sector. Porter developed VCA as an instrument for identifying value at each step of production, so as to reconfigure the value chain to improve its competitive advantage. In the 90s, the global commodity chain approach added additional dimension such as power relations within the chain and coordination as a source of competitive advantage. Thus, the scope of VCA was extended beyond the confines of a particular firm and beyond the limited scope of economics. VCA is no longer value neutral. It is increasingly being used to ask where the poor are located within a value chain, and what opportunities exist to involve them during the process of upgrading a value chain through improved technology and strategic alliances for marketing. It is worth while at this stages to look at some definitions to distinguish between a simple supply chain and a value chain.

A **supply chain**, or logistics network, is a system of organizations, people, technology, activities, information, and resources involved in moving a product or service from supplier to customer (Wikipedia, February 2009).

A **value chain** describes the full range of activities required to bring a product from its conception to its end use and beyond. This includes activities such as design, production, marketing, distribution, and support to the final consumer (Ruijter de Wildt, Elliott and Hitchins, 2006).

On the face of it, the two definitions appear similar. However, a value chain is a supply chain with a difference. It brings value to the final consumer and competitive advantage to the producer through strategic alliances. According to Agriculture and Food Council, Alberta a value chain is a vertical alliance (or strategic network) of enterprises (within a supply chain) collaborating to achieve a more rewarding position in the market (Agriculture and Food Council, Alberta, 2002).

An illustration provided by Mundy (2006) brings out the difference clearly (Box 1.1).

Box 1.1: Differentiating between supply and value chains: Example of pineapple sub-sector

A beach resort on the island of Zanzibar serves its guests with fresh pineapple juice for breakfast, made from pineapples grown in Tanzania. In a typical supply chain, farmers cultivating pineapples are at one end of the chain. Between the tourist and the farmer is a long chain of activities: planting, pest and disease control, harvesting, sorting, grading, packaging, transport, shipping and storage. Different actors carry out different activities, incur costs as well as risks and make profits in order to continue being a player in the supply chain. Some actors in the chain benefit more than the others, when they exploit advantages in the chain. For example, a trader who has the only truck in an area can buy at rock-bottom prices, then, sell at a high mark-up in the nearby town. Supermarkets or processors are often powerful players that can dictate terms to their suppliers and force down prices. Farmers are often at a disadvantage in such chains since they lack the market intelligence, are not organized and lack an understanding of the market. They do not control the terms on which they participate. This supply chain functions – but not very well: the farmers make little money and have no incentive to improve their product. The traders face a great deal of risk and can buy only low-quality produce. The end-user, in this case, the beach resort owner, is never sure of getting fruit of the desirable quality at the right price.

Contrast this with the following value chain. An association of farmers in Tanzania has negotiated a deal with a trader who buys a certain amount of high-quality fruit each week. The trader in turn has a contract with the hotel's supplier. This is a value chain – each of the actors in the chain is prepared to invest in the chain, and to support the other actors, to make sure that it functions smoothly. This makes sense for them all – all benefit from having a smooth supply of top-quality fruit arriving in the hotel for breakfast. Information is shared freely across the chain since all are working towards a common purpose. Developmental organisations can work with farmers' groups and other actors to convert supply chains into value chains.

Source: Paul Mundy (2006)

The precise points of difference between the two concepts are brought out in Table 1.1.

Table 1.1: Comparison between the Concepts of Supply and Value Chains

Aspects	Supply Chain	Value Chain
Overall focus	Effective planning and management	Satisfying a particular customer need
How does it function	Deals with all vertical chain activities leading from production to consumption.	Is a particular form of supply chain that works through strategic alliances between number of actors in the chain
Expected outputs and outcomes	Price and cost effectiveness and efficiency; commodity driven	Value and quality; driving force is customer needs.
Power equations	Are often skewed and the more powerful players tend to dictate terms often exploiting others in the supply chain	Power equations are more balanced and farmers, being better organized are often able to negotiate terms on an equal footing. Common values tend to promote collaboration and mutual support between members of the chain.
Transparency and information flows	Information flows are skewed following the pattern of power relations within the chain. Farmers/ rural producers being unorganized have usually little idea about who the other players in the chain are, what happens to their produce after they sell it, or what types of products consumers want.	Transparency is important for the chain to function well. Information is shared across the value chain. Farmers/ rural producers are fairly well informed about the needs of the end users and try to adopt production to their specific needs. Sometimes end-to-end communication between producers and consumers is organized for the purpose.
Application	Not concerned about poor – just a default arrangement among business organisations	Being used to ask where the poor are located in a value chain and to identify pro-poor opportunities

Source: Adapted from Hans Posthumus Consultancy (2007)

In the light of the above, VCA can be understood as the methodology by which the structure and processes of a value chain are understood. The objective of such an analysis could be to examine how an existing value chain works and whether there is scope for upgrading it. Alternatively, it can also be used to study an existing sub-sector or a set of supply chains, to explore the possibilities of creating a value chain for the given product or raw material.

A **pro-poor VCI** can be described as a market-based intervention that looks at the entire value chain as an opportunity to generate livelihoods for the poor, while creating value, that is, increasing the overall productivity and delivering quality products and services to the end user/ customer.

The famous Amul Dairy, which belongs to the cooperative milk value chain of farmers in Kaira District, Gujarat, is perhaps among the oldest and most successful pro-poor value chains of the country. It was created in the mid-forties through a partnership between Congress leader Tribhuvandas Patel (under the guidance of leaders such as Sardar Patel and Morarji Desai) and Dr. Vargese Kurien a technocrat turned social entrepreneur. The objective was to prevent the farmers from being exploited by a private dairy called Polson Ltd. which had acquired monopoly rights from the British government for procurement of milk from the region. Polson was the sole supplier of milk and other dairy products such as butter to the Bombay market located some 350 kms away.

The new value chain was owned by the small and marginal farmers of Kaira district. It comprised of a two-tier system of cooperatives. The village level cooperatives collected the milk from individual farmers at their collection centers. A district level union of cooperatives processed the milk at its dairy and provided guidance and support services to the farmers. It also marketed the milk and value added products to consumers, giving them value for their money. At a later stage, several such Unions in Gujarat federated to form the Gujarat Cooperative Milk Marketing Federation which focused exclusively on the marketing function. On the insistence of the then prime minister shri Lal Bahadur Shastri, the model was scaled up throughout the country through Operation Flood, catapulting India into the number one position of milk producing countries in the world.

Despite Kurien's remarkable success, not many social entrepreneurs were willing to tread this path. However, in recent years several NGOs and social entrepreneurs have successfully created pro-poor value chains in different sub-sectors. We present six such cases in Part 2 of this volume.

Marketing management

A value chain interventionist must also be well versed with basic concept of marketing management. A few important concepts are summarised below.

The value creation and delivery process

This brings us to the subject of 'creating and delivering value', which sums up the current view of business managers about the process of marketing. According to Kotler et al. (2009):

> *In a hyper-competitive economy with increasingly rational buyers faced with abundant choices, a company can win only by fine-tuning the value delivery process, and choosing, providing and communicating superior value.*

The authors further explain that the traditional view of marketing in which a company makes a product and then sells it can no longer work except in economies marked by acute shortage of goods and services. In a competitive economy, where customers face abundant choices, a smart marketing manager must design and deliver offerings for well-defined target markets. This implies that planning for marketing must precede planning for the provision of goods and services. The value creation and delivery sequence can be divided into three phases, as shown in Figure 1.3.

The first phase, which involves 'choosing the value', represents strategic thinking, and the formula segmentation, targeting, positioning (STP) represents the essence of *strategic marketing*. The following two steps of delivering and communicating value represent *tactical marketing*. Step two is about 'providing the value', which involves decisions regarding specific product features, prices, distribution, etc. The last phase is 'communicating the value' by utilizing the sales force, sales promotion, advertising, and other communication tools to announce and promote the product.

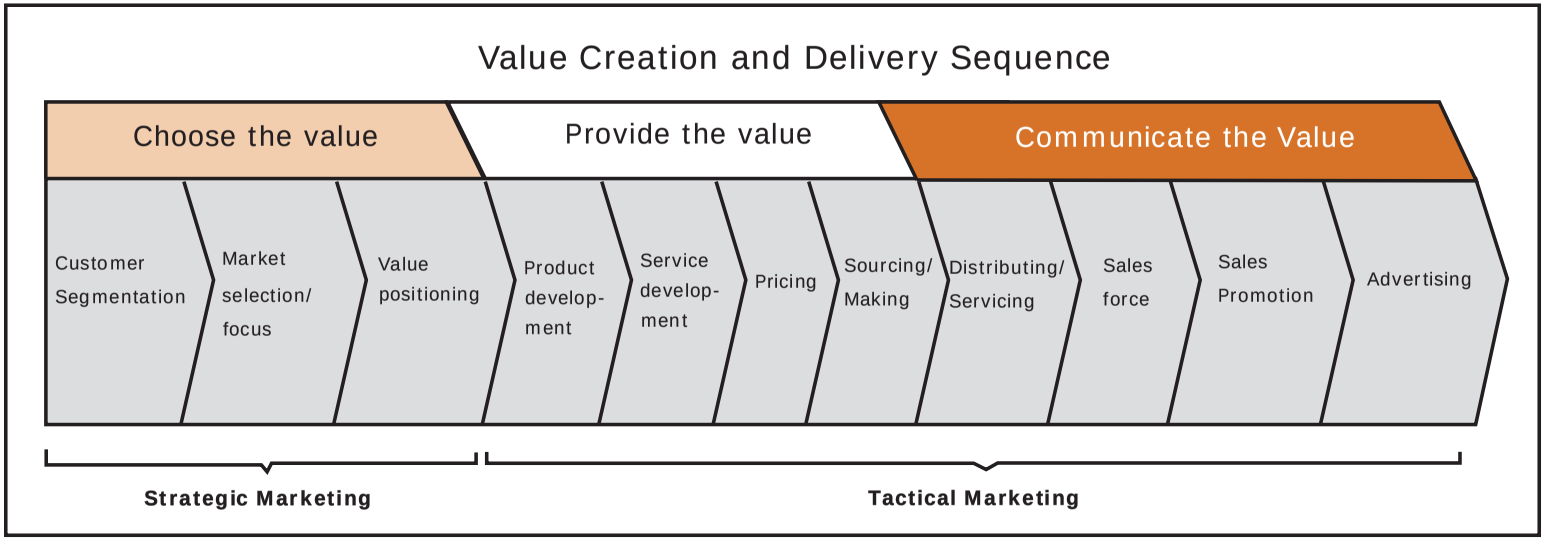
Marketing Mix

Tactical marketing is also captured in the 4P framework or what is known as the Marketing Mix (see Box 1.2).

Optimizing the marketing mix is the primary responsibility of the marketer. By offering the product with the right combination of the four Ps, marketers can improve their results and marketing effectiveness. Making small changes in the marketing mix is typically considered to be a tactical change. Making large changes in any of the four Ps can be considered strategic.

The *marketing plan* is the main instrument for directing and coordinating the marketing effort. Following from the above analysis of the marketing process, the marketing plan comprises two main parts, namely, strategic and tactical. The strategic marketing plan lays out the target markets and the value proposition the firm will offer, based on the analysis of the best market opportunities. The tactical marketing plan specifies the marketing tactics, including product features, promotion, merchandizing, pricing, sales channels and service.

Figure 1.3: The Value Delivery Process



Source: Philip Kotler.et.al (2009)

Box 1.2: Marketing Mix

Marketing Mix is the set of controllable, tactical marketing tools comprising product, price, place and promotion, that the firm blends, to produce the response it wants in the target market.

• **Product:** A tangible object or an intangible service that is mass produced or manufactured on a large scale with a specific volume of units. Intangible products are often service-based such as the tourism industry and the hotel industry. Typical examples of a mass-produced tangible object are the motor car and the disposable razor. A less obvious but ubiquitous mass-produced service is a computer operating system.

• **Price:** The price is the amount a customer pays for the product. It is determined by a number of factors, including market share, competition, material costs, product identity and the customer's perceived value of the product. The business may increase or decrease the price of product if other stores have the same product.

• **Place:** The place represents the location at which a product can be purchased. It is often referred to as the distribution channel. It can include any physical store as well as virtual stores on the Internet.

• **Promotion:** This represents all of the communications that a marketer may use in the marketplace. Promotion has four distinct elements — *advertising, public relations, word of mouth* and *point of sale*. A certain amount of crossover occurs when promotion uses the four principal elements together, which is common in film promotion. Advertising covers any communication that is paid for, from television and cinema commercials, radio and Internet adverts through print media and billboards. One of the most notable means of promotion today is the Promotional Product, as in useful items distributed to targeted audiences with no obligation attached. This category has grown each year for the past decade whereas most other forms have suffered. It is the only form of advertising that targets all five senses and has the recipient thanking the giver. Public relations are where the communication is not directly paid for and includes press releases, sponsorship deals, exhibitions, conferences, seminars or trade fairs and events. Word of mouth is any apparently informal communication about the product by ordinary individuals, satisfied customers or people specifically engaged to create word of mouth momentum. Sales staff often plays an important role in word of mouth and Public Relations (see Product above).

Source: Mc Carthy, Perreault, and Cannon (1975)

Selling versus marketing

From the above, it becomes amply clear that selling is not the same as marketing. Rather, it is a small step in the marketing process. In marketing, we create value for the customers by aligning his/her need with the product/service offerings. For example, while selling a bottle of mineral water, the entrepreneur is actually meeting the safety need of the consumer along with the need to quench thirst at his/her convenience. Hence, if one is providing safety as well, the bottle and the place it is sold from must also look safe.

The above discussion provides but a rudimentary understanding of the marketing process, which would suffice for the rest of this volume. However, the practitioner interested in actually taking up market-led intervention would be advised to refer to a few standard textbooks on the subject (see Resource Guide, Annexure 2)

Entrepreneurial Strategies for Livelihood Augmentation

Entrepreneurial strategies for livelihood augmentation consist of market-led interventions including value chain interventions. Market-led interventions include a wide range of initiatives on a scale of complexity starting from simple initiatives like providing market intelligence to farmers to creating entire value chains (see table 1.2 for a typology).

The market-led interventions that are limited in scope are discussed in chapter 3 while interventions designed to create pro-poor value chains are discussed in chapter 5.

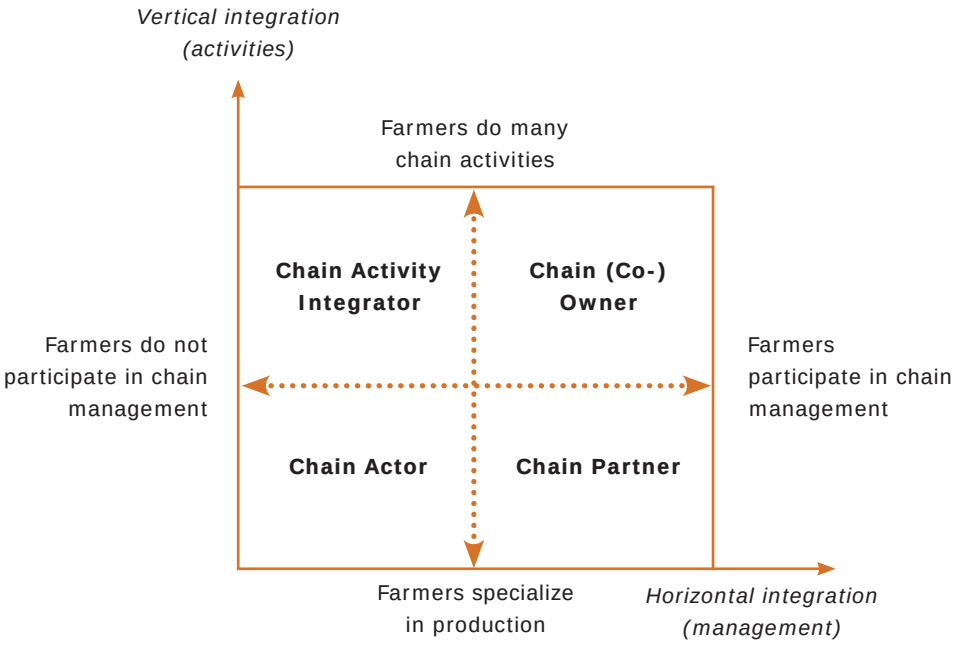
Among all market led interventions, the most challenging is to work with the entire value chain, often generating livelihoods at different nodes of the chain. Working with entire value chains, however, calls for a long-term commitment on the part of the social entrepreneur and a sustained effort in working with various stakeholders (often covering a decade or two).

Table 1.2 : Typology of Market Led Interventions

No.	Category	Strategy
Limited Market Interventions		
A	Addressing Market Imperfections	1) Market intelligence to deal with market information asymmetry
		2) Empowering primary producers through market exposure and education
		3) Influencing the local market as a major player
		4) Creating local market infrastructure like haats, storage facilities etc.
B	Tapping Market Opportunities	1) Market directed production
		2) Market linkages (backward and forward)
		3) Backward and forward integration
		4) Contract farming
C	Creating New Market Opportunities	Concept selling prior to product launch, through education, demonstration etc.
Working with Entire Value Chains		
D	Working with existing value chains	1) Reviving a sick value chain
		2) Reconstructing a value chain
		3) Leveraging a value chain
E	Creating new value chains	1) Linking distant consumers of specific value orientation with dispersed marginal producers
		2) Creating a network of decentralized local value chains
		3) Creating ICT based value chains in the service sector

It is worth mentioning that many researchers do not make the kind of distinction that we have made between market-led interventions and VCIs. For them any intervention in the value chain (upstream or downstream) that results in gains for the poor producers may be seen as a value chain intervention. With this understanding, Mundy (2006) provided a framework that distinguishes four basic forms of small scale farmer participation in supply/ value chains (see matrix in Figure 1.4).

Figure 1.4: Forms of chain participation by small and marginal farmers



Source: Mundy (2006)

Farmers may be located anywhere on this matrix. To start with, most farmers belong to the category of *chain actors*. These are farmers who become crop specialists producing crops of high quality as per the requirements of the market. Becoming crop specialists is a necessary first step, prior to any other form of chain development. If they start integrating more functions in the value chain such as grading, storing, processing, branding, retailing etc. they graduate into the *chain activity integrators* category. This allows them to get a larger share of the revenues and in case of perishable products, minimize the losses when these cannot be sold immediately. Even when they perform more functions in the chain they are unable to exert control over the chain and are not able to influence factors such as pricing, technology, quality standards, logistics, time-frames etc. On the other hand *chain partners* are farmers who are organized enough to exert control even if when they have not moved up the value chain to integrate various functions. They have a long term partnership with traders, processors or retailers, which aim at providing value to the end user while remaining profitable. The last category is that of *chain (co-)owners*. Here, farmers have not only moved upstream in the chain but have also improved their influence and control over the value chain. Chain (co-) owners are organized in business cooperatives that develop new products and reach the end-consumer. Such farmers' organizations can negotiate lucrative prices and take a fair share from the chain.

In Mundy's framework, the Chain (co-)owner category corresponds to the value chain intervention mentioned in our typology. What is worth noting from Mundy's framework, is that such an intervention leads to both economic benefits, in terms of better productivity and income levels for the farmer as well as socio-political benefits, in terms of better social capital of the farmers leading to higher bargaining power and influence over various decisions in the value chain.

End-notes

1. Important technical terms are highlighted in italics when they appear the first time. These are explained in the glossary of terms in Annexure 1.

2. This section draws mainly from training notes by Hans Posthumus Consultancy (2007)

2 General Principles and Ethical Values

A dozen principles hold the key to successful implementation of market-led interventions. These principles are derived from an analysis of the case studies provided in part 2 of this volume as well as the available literature on the subject.

1. In market-based interventions, best results can be demonstrated when working with one sub-sector at a time. Hence, a social entrepreneur must know how to select a suitable sub-sector.

2. To succeed in the marketplace, producers and their support agencies must learn to produce what the market demands. Hence, understanding of market must precede intervention.

3. Markets are competitive; they do not permit sloth, indulgence or waste. Hence, the facilitating agency and producing communities will have to become efficient and cost effective in every sphere of their enterprise.

4. The gap between what the market demands and what the producers can deliver must be bridged through a variety of measures. An assessment of the ruling constraints at each node of the value chain is essential to understand this gap.

5. By aggregating the produce and through collective marketing the marginal and geographically dispersed producers can gain bargaining power. The ability to hold the produce or add value to it also increases the degrees of freedom with the market player.

6. An entrepreneurial intervention for livelihoods must be able to build backward linkages or integrate backwards to ensure timely supply and better quality of inputs to the primary producer, leading to cost effectiveness and better quality of outputs.

7. In order to perform all the above-mentioned functions, appropriate people's institution(s) must be built to manage the enterprise(s).The number of institutions that need to work together in tandem increases as the complexity of intervention increases.

8. The entrepreneurial intervention must develop strategies to deal with both

enterprise and institutional risks.

9. The enterprise must build a value system, in which all are committed to profitability as well as social responsibility (welfare objective).

10. Facilitating agencies need to develop specific orientation and skills, and/or recruit people who have better understanding of market and business development activities.

11. Sometimes non-market strategies such as lobbying, advocacy to challenge policies, etc., may be necessary to create a level playing field or to enable positive discrimination for community-based micro-enterprise.

12. Interventions that aim at reviving or building an entire value chain call for long-term commitment of the social entrepreneur or developmental agency. Community-based institutions, however, should be empowered to take up more and more responsibilities over time, and to independently manage their enterprise to the extent possible.

Given the importance of these principles, we need to understand each one in some detail.

1. Working with one sub-sector at a time

In market based interventions, best results can be demonstrated when working with one sub-sector at a time. Hence, one must know how to select a suitable sub-sector.

The choice of the product/service offerings should be guided by the main strengths of the project area and the core competencies of the target producers. For examples of unique strengths include production of Tasar silk and lac for which the ideal ecological conditions exist in certain areas of jharkhand and Bihar. The Irula tribe in southern India has a unique competence of catching snakes which can be used to extract venom for industrial purposes. Sub-sectors may be short-listed on the basis of their suitability for the poor to engage in these as well as their employment generation potential. These sub-sectors may then be subjected to further scrutiny.

BASIX[1] has developed a framework that helps the practitioner to analyse a sub-sector by examining four key components of its external environment viz.: a) *Factor conditions* b) *Demand conditions* c) *Industry conditions and* d) *Institutional conditions* (Dutta, Mahajan and Thakur 2005)

Each criterion is evaluated with the help of selected indicators. Three key informants are asked to rate the criteria on a five-point scale. The average scores of different sub-sectors are compared and the one with the best score is selected for in-depth analysis.

The final choice would, of course, depend also on the organization's competence and ability to take up the challenges of a given sub-sector.

2. Learning to produce what the market demands

To succeed in the marketplace, producers and their support agencies must learn to produce what the market demands. Products and services that do not meet the design and quality specifications of the market are unlikely to succeed. Hence, an understanding of the market for the tentative product/service should precede any intervention.

The efforts of the GoI to promote khadi and village industries through the Khadi Village Industries Commission (KVIC) represent a classic case of long neglect of this principle. Originally promoted by Mahatma Gandhi in the '20s for rural self- employment, khadi and village industries have been identified by the 11th Five Year Plan as one of the sub-sectors with significant prospects for employment. However, in spite of the large and diverse potential market that the country provides, khadi sales have stagnated even as the textile market has made remarkable progress. Production and marketing inefficiencies, left unattended for decades, have isolated khadi and as a result it has not been able to be a part of the changing consumer preferences. Marketing and sales are primarily through 7,050 undifferentiated and dilapidated outlets of khadi institutions that are isolated from current marketing trends in terms of product design, and service quality. Incentive structures through subsidies for production and marketing have impeded reforms meant to anchor khadi to changing consumer preferences. Taking cognizance of the situation, a comprehensive reform package has been proposed under the Khadi Reform and Development Programme (ADB, 2008).

In the field of hand-made handicraft and ethnic fashion apparel, the needs of consumers are very specific and vary from season to season depending on the trends in the fashion world. In the case studies showcased in this volume, AGROCEL organizes annual week-long workshops with designers from international clients, who explain their exact requirements, and clear the samples for the entire year. Similarly, Community Friendly Movement (CFM) also organizes annual meets, at which producers, consumers and designers interact face to face. Consumers share their ideas of the kind of products they visualize in future, and producers pick up these ideas to come up with new products. Hence, market feedback is an integral part of learning to produce what the market demands.

3. Learning to be cost effective and efficient

Markets are competitive; they do not permit sloth, indulgence or waste. Hence, the facilitating agency and producing communities will have to become efficient and cost effective in every sphere of their enterprise.

Many developmental agencies have learnt this lesson the hard way. In their enthusiasm to promote community-based enterprise, some have promoted processing units such as rice mills, dal (pulses) mills, etc. A majority of the farm products are bulky in nature; this involves careful working capital and logistics management. This also implies having an efficient management information system. Most CBOs entering the field for the first time would not have the expertise to manage working capital on the scale that the enterprise demands. Any lapse in this area can mean wiping out of a substantial part of the working capital (which is often several times more than the investment in the mill itself). When this happens, it becomes very difficult for the mill to recover since no bank will be prepared to risk its money by providing more working capital. Under the situation, hiring of professional staff and keeping strict vigil on the working of the unit by the people's representatives are the best ways to make a success of the enterprise.

4. Bridging the gap between producers and markets

The gap between what the market demands and what the producers can deliver must be bridged through a variety of measures. Following are some of the measures to bridge the gap:

- *Expert guidance in product/service design*
- *Technical inputs and adoption/acquisition of suitable technology*
- *Capacity building and skill up-gradation inputs*
- *Supply of quality inputs at the doorstep of the producer at a reasonable price*
- *Access to credit at non-exploitative terms.*

An assessment of the ruling constraints at each node of the value chain is essential to understand this gap.

Recognizing this principle, organizations such as BASIX and AGROCEL set up a large number of Agricultural Service Centres, which provide technical guidance, credit, insurance, and capacity building services all under one roof. Because the technical advice is plot-specific, it produces the desired results in terms of increased productivity. AGROCEL found that by providing this guidance free of cost, it could gain the confidence of the farmers, who came to them for supply of inputs. The centres became economically viable by retaining a small percentage as fee for the inputs supplied.

BASIX found that farmers were more willing to take risks and adopt new technology when they had access to credit. For instance, working in the dairy sub-sector in Andhra Pradesh, it found that milk production varied depending on the combination of treatments. As shown in Table 2.1, credit alone did not lead to significant increase in milk production whereas technical advisory services made a substantial difference.

However, when credit and technical services were provided in conjunction, the results were by far the best, with milk production registering a six-fold increase!

Table 2.1: Impact of Credit and Technology Adoption on Milk Production

Treatment	Increase in milk procurement over two years
No technology – no credit (control villages)	30%
No technology – only credit	34%
Only technology – no credit	117%
Both technology and credit	183%

At the technical level, producers should be prepared to reorient themselves and adapt to new technology, designs, product concepts, etc. AGROCEL had to invest substantially in helping farmers in Kutch to switch over to organic cotton production because this was a precondition for getting access to the fair trade distribution channels in foreign countries. In the process, it also had to provide organic certification services and guidance.

The leather workers in Athani and Nippani of Northwest Karnataka, who were once famous for their Kolhapuri foot-ware, had to substantially change the designs and leather processing technology while retaining traditional motifs, in order to come out with products that were acceptable for the export market. They could tap this market with the help and support of Asian Centre for Entrepreneurial Initiatives (ASCENT), a Bangalore-based entrepreneurship promotion agency (see Box 5.1., Chapter 5).

5. Increasing bargaining power through collective marketing

By aggregating the produce and through collective marketing the marginal and geographically dispersed producers can gain bargaining power. The ability to hold the produce or add value to it also increases their degrees of freedom with the market player.

The benefits of collectivization are well known. This, however, is not without its risks and can become a double-edged sword. If handled ineptly by leaders who lack an understanding of the market, aggregation could only multiply the risk for the farmers. A single bad experience would put the whole movement back by several years. On the other hand, when handled by experienced and trained marketing professionals working on behalf of the collectives, excellent results can be achieved as demonstrated by PRADAN in the case of poultry, tasar silk, lac, horticulture, and various other sub-sectors.

The ability to add value increases the degree of freedom with the market player. Not only does value-addition reduce the risk of the commodity market, value-added goods

fetch higher profits for producers. It was this realization that prompted Janarth, an NGO in Maharashtra, to adopt a strategy of influencing the local commodity market by participating as a trader and acting as a 'persistent bull'. it established an agro-processing unit at Wadgaon. The unit comprises a dal mill with a capacity of 25 MT per day, drying yards, godowns, and smaller units, including a maize pulverizer, machines for cleaning and polishing whole grains such as sorghum, green moong, etc. Janarth has tried to persuade farmers to undertake simple post-harvest steps such as sorting and grading of their material so that they realize a better price.

In the case of tasar silk, MASUTA, a collective of women silk yarn producers, has promoted a private company to market its fabric in the domestic and export fashion markets. The company named Eco-Tasar Silk Pvt. Ltd has been promoted jointly by MASUTA (which holds the majority share capital) along with a marketing specialist, who also serves as the CEO of the company. The newly formed company has started the manufacture and sale of value-added products from part of the yarn produced by MASUTA, leaving the rest to be marketed by its parent company. During 2007-08, MASUTA produced about nine tonnes of yarn, of which about half was sold by the parent company, and the rest taken up by Eco-Tasar for value addition. The collective effort of the people's institutions has enabled them to move up the value chain over a period of 20 years, and capture almost 70% of the price spread!

6. Effecting control over supply of quality inputs

An entrepreneurial intervention for livelihoods must be able to build backward linkages or integrate backwards to ensure timely supply and better quality of inputs to the primary producer, leading to cost effectiveness and better quality of outputs.

PRADAN, which has been working in several states, including Jharkhand, MP and Orissa, was among the first to recognize this principle. Working with tribal populations, PRADAN decided to select just one or two key sub-sectors in a given block. It then used all its resources and energy to work towards building backward and forward linkages.

Backward linkages enable the primary producers to have more control on the supply of quality inputs and control cost of production. The facilitating agency and/or CBO must learn to master the skill of aggregating and disaggregating demand so that quality inputs can be supplied at the right time, and in the right quantity at the doorstep of the producer.

Backward integration is the best way of ensuring control over supply and quality of inputs. In the poultry sector, the chain of cooperatives promoted by PRADAN was able to integrate backward by setting up its own feed units, which ensured quality and fresh feed to the primary producers. It set up its own hatchery that ensured quality day-old-

chicks to the producer. It plans to further integrate backwards by producing quality eggs for the hatchery at a breeder farm of its own. This will lead to a high percentage of hatching, and, therefore, better performance of the hatchery.

Similarly, in the tasar silk sector, PRADAN, in collaboration with the Central Silk Board (CSB), trains tribal youth in Jharkhand, to ensure disease free layings (DFLs), which are then supplied to the cocoon raisers. These youths picked up the new technology successfully and in due course were referred to as 'grainage entrepreneurs'. A few years later, CSB trained the grainage entrepreneurs to produce 'basic seed material', which only CSB had been producing. Efforts are now on to help them to integrate even further backwards by learning how to produce 'nucleus seed material'. Accomplishing this step will give the tribal cooperatives total control of the supply of quality inputs.

7. Developing appropriate social capital

In order to perform the above-mentioned functions, appropriate people's institution(s) must be built to manage the enterprise(s).The number of institutions that need to work together in tandem increases as the complexity of intervention increases.

The complexity of the interventions can be in terms of :

a) product-market mix
b) geographical spread
c) levels of aggregation
d) number of nodes of the value chain

Here, it is worth mentioning that two broad institutional strategies have been found to prevail. The first, and more traditional one, is for a typical non-profit developmental agency to facilitate the establishment of CBOs that are for profit. The latter may take the form of cooperatives, mutual benefit trusts, producer companies, associations, unions, etc. Welfare functions are typically taken care of by societies and trusts. Examples of this approach include those adopted by PRADAN, UNNATI, etc.

The second, and more recent approach, is for a social entrepreneur to promote a private company, which takes care of the commercial part of the intervention, and other forms of institutions to take care of the developmental and welfare parts. The premise here is that if the private company provides professional services that can lift the target producer families out of poverty, they would be willing to pay a small fee for these services. Given the scale of operations, this fee would be enough to make the company viable. Its main function would be betterment of its target group, be it farmers or artisans or other villagers. But in order to serve this main objective, it must also be efficient in its services, and come up with innovative marketing strategies in order

to compete and perform well. Examples of this approach include Rangasutra, CFM, AGROCEL, BASIX, etc.

The choice of institution at a given level could be formal or informal, for profit or not-for profit, group or community-based, depending on the nature of activity and membership. It can also depend on the legal and business environment of a given sub-sector. In addition to CBOs, individual service providers and/or nano-entrepreneurs may also be involved, disposing of some function in the value chain either independently (such as the grainage entrepreneurs of PRADAN's tasar silk value chain), or in collaboration with CBOs (such as local entrepreneurs of CFM, who organize artisan groups, or the service providers employed by PRADAN's poultry cooperatives that provide various services to the producer at her doorstep). Together, these individuals and people's institutions along with other resource persons and institutions linked to the intervention, form an ecosystem of mutually dependent economic entities.

In a complex and mature intervention, the institutional arrangements could also be complex. It is often useful to map the institutions and individuals working together in order to understand the relationships between them. (See Chapter 4 for available mapping techniques). Mapping of this ecosystem over time shows the manner in which the intervention has evolved.

8. Developing strategies to deal with enterprise and institutional risks

The entrepreneurial intervention must develop strategies to deal with risks. There are of two type of risks: a) market and enterprise level and b) institutional level.

Market and enterprise risks : Strategies to deal with enterprise risks are better known, and can be learnt quickly by looking at successful enterprises run by the private sector. The poultry sector in India has experienced several price shocks during the past few years on account of bird-flu scare. These, shocks were rude enough to wipe out a majority of small-scale entrepreneurs. However, the poultry cooperatives promoted by PRADAN surprised everyone in the industry by surviving these shock, and are still making profits. It developed an internal pricing mechanism for its members, which effectively de-linked production from marketing risks.

In the high-end ethnic fashion markets, designs change from season to season. Organizations such as CFM, AGROCEL and ASCENT are able to insulate the primary producers from the risk of international marketing, which includes fluctuating exchange values, changing moods and preferences of distant customers, changing legal trade regimes, etc.

Some of the known measures to deal with market and enterprise risks are listed below:

- Strategies for accessing market information
- Interaction between producers and consumers leading to better undesrstanding of the latter's need
- Stringent quality control systems
- Familiarity with legal context of the market
- Diversifying portfolio of products/business

Institutional risks : The performance of the cooperative sector in the country has a poor track record. Almost all sections of the society have burnt their fingers at some point or the other when cooperative institutions have failed and betrayed the faith placed by members. When AGROCEL wanted to promote cooperatives amongst farmers in Kutch to cultivate organic cotton, the farmers refused to have anything to do with such an institutional form. Most of the cooperatives in the region had suffered scams due to corrupt leaders or political interference. The risks associated with collective institutions, therefore, cannot be undermined. However, it is not as if such risks are insurmountable. Several examples of successful collective action exist showing that education of members about their rights and responsibilities, infusion of a common vision and value system by leaders who themselves possess such values, and installation of systems of checks and balances, including transparency and accountability of leaders are some of the measures that have produced positive results.

9. Building appropriate value systems

Community-based institutions and other institutions involved in the intervention must build a value system, in which all are committed to profitability as well as social responsibility (welfare objective).

Building an institution that is strong and sustainable requires investment of time and energy by its leaders. Investments are also needed in building knowledge and skills of members and office bearers, and in cultivating right attitudes and values. All members must realize the importance of achieving financial viability for members as well as the collective institution. Whereas welfare and social objectives are important because these represent the very purpose of the institution's existence, profitability of the enterprise is also important in order to be able to survive and compete in the market place. The importance of meeting quality specifications of the market as a non-negotiable condition must be understood by all members. Often strict norms may have to be evolved to drive home this point because it is the basis of survival in a competitive marketplace.

10. Developing market orientation and recruiting professionals

Facilitating agencies need to develop specific orientation and skills and/or recruit people who better understand markets, and business development activities.

Most NGOs lack expertise or experience in dealing with markets. As a result they are often hesitant to take up interventions, which place such demands on them. Organizations such as Marketing and Research Team (MART)[2] and Earthy Goods[3] have come up precisely to meet the need of NGOs eager to support people's institutions, which have embarked upon collective enterprise either at the group or community levels, and which need professional advice in negotiating the market players successfully. Professionals with marketing expertise can be brought in to address this problem in a variety of ways, ranging from hiring their skills and services from the market to providing equity share in marketing organizations promoted by people's institutions. Young and motivated professionals can also be persuaded to join mature cooperatives, producer companies, etc., or private companies that are set up with a social objective. All in all, this is the most difficult aspect of market-based interventions because professionals with right values are hard to come across.

11. Creating a level playing field

Sometimes non-market strategies such as lobbying and advocacy to challenge policies may be necessary to create a level playing field or to enable positive discrimination for community based micro-enterprise.

This is a familiar ground for most activist forms of developmental agencies. During the initial phase of the SHG movement, commercial banks were hesitant to provide loans to small groups of poor women, in the absence of any collateral. A good deal of lobbying led to policies and programmes initiated by NABARD, the apex banking institution for rural development. Its initiatives led to the creation of a more level playing field and new norms for lending to the poor.

PRADAN had been lobbying with the forest department for several years to consider tasar cocoon rearing as a forest activity. In the absence of such recognition, this was considered an illegal activity in the forest, and the tribals dependent on the activity were often denied access or harassed by the petty officer. After sustained lobbying, PRADAN succeeded in getting a resolution passed that made this a legitimate forest activity. Cocoon raisers will now be given identity cards and allowed to go about their livelihood activity freely.

12. Ensuring long term commitment of external agency for VCI

Interventions that aim at reviving or building an entire value chain call for long-term

commitment of the social entrepreneur or developmental agency. Primary producers, however, should be empowered to take up more and more responsibilities over time, and to independently manage their enterprise to the extent possible.

Donor agencies are often overly concerned with 'withdrawal strategy' of a developmental agency from a particular area after a certain number of years. In the case of short-term market interventions such as developing market linkages between primary producers and potential buyers, withdrawal could be planned in advance, and communicated to the local community. However, it should become abundantly clear to all stakeholders that interventions that aim at reviving or building value chains call for long-term commitment of the social entrepreneur or developmental agency concerned. It took about two decades for the tasar silk intervention of PRADAN to mature and cover the entire value chain, right up to the retail market. A mix of PIs, working in tandem with each other was created to handle various functions at different nodes of the value chain. However, PRADAN continues to play the sector-development role, which includes functions such as research, policy advocacy, and capacity building of the institutions.

Long-term involvement of the developmental agency should not lead to dependence of the primary producers on the former. The role of the agency should be to explore new markets, and establish robust and sustainable procedures and systems to tap the markets. Once this is done, it should move on to other areas of the enterprise or sector development that need attention while the primary producers begin to manage their own institutions with or without the help of professionals hired from the market. Long-term mapping of the functions played by different actors with the help of actor-function matrix (see Chapter 4) is useful to monitor the extent of empowerment of local actors that is taking place over time.

End-notes

1. BASIX, a private company with a social objective, is charged with the mission to promote a large number of sustainable livelihoods for the rural poor and women through the provision of financial and technical services in an integrated manner. BASIX reaches out to those poor households that do not have access to either formal credit or technical guidance for their livelihoods.

2. Pradeep Kashyap established MART in 1993 as a private company with social objectives. MART works as a professional rural consultancy organization with clients both in the corporate sector as well as in the development sector.

3. Earthy Goods and Services Pvt. Ltd. was established about two years back by a young entrepreneur Reshma Anand, in collaboration with ICICI Foundation for Inclusive Growth. It provides a shared market platform for its partners (rural producers), which enables them to access urban consumers and markets on fair terms. It works towards building the capacities of its partners so that they may scale up and grow as independent ventures over time (see www.earthygoods.co.in for details).

3 Market-led Interventions

Introduction

Market-led or market-based interventions in the context of livelihood augmentation are terms that are used loosely to refer to interventions that help the primary producers to get a better price for their produce. However, these include a wide range of interventions starting from simple initiatives, such as, providing market intelligence to farmers or establishing forward linkages with potential buyers, to creating an entire value chain.

Market-led interventions can be broadly divided into four categories depending on their objectives.

a) Addressing the problem of market imperfections
b) Tapping existing market opportunities so that primary producers, particularly marginal farmers, women and the poor, can participate more effectively in economic activities
c) Creating new market opportunities through education and concept selling
d) Working with entire value chains

The Different strategies that fall within these four categories and their examples are given in Table 3.1, and discussed in detail.

Addressing Market Imperfections

Market intelligence to deal with information asymmetry

Farmers in remote areas, particularly small and marginal farmers, often lose out because of lack of information on best time and place to sell their produce. Lack of market intelligence also prevents them from effectively bargaining with traders for a better price. Sometimes, the mere fact of making primary producers aware of prices in not-too-distant markets can bring about dramatic increases in price realization. In coastal Bhavnagar and Amreli, People's Learning Center (PLC) for Coastal Livelihoods[1] enabled SHGs of a fishing community to carry out lobster fattening on the sea coast, using pit and cage culture. After establishing contacts with merchants in different local markets, including the larger market of Veraval, the price realized for marketable-size lobsters by the fishermen increased five-fold from Rs 150/kg to more than Rs 750/kg. The fishermen now routinely collect information on prices from the merchants on mobile phones.

Table 3.1: Typology of Market-led Interventions

No.	Category	Examples
A	**Addressing Market Imperfections**	
1	Market intelligence to deal with market information asymmetry	MCX, ITC
2	Empowering primary producers through market exposure and education	OTELP
3	Influencing the local market as a major player	Janarth
4	Creating local market infrastructure such as *haats* and storage facilities	Swadhina, ITC
B	**Tapping Market Opportunities**	
1	Market-directed production	TSRD - tomato
2	Market linkages (backward)	PRADAN - poultry
3	Market linkages (forward)	OTELP - NTFPs
4	Contract farming	BASIX – Frito Lays
C	**Creating New Market Opportunities**	
1	Concept selling prior to product launch through education, demonstration, etc.	Vermi-compost, organic farming
D	**Working with Entire Value Chains**	AGROCEL - organic cotton; PRADAN - tasar silk

Providing market intelligence to farmers was also the starting point for Multi-Commodity Exchange of India Ltd. (MCX). MCX's core business deals with price information by leveraging ICT to reach farmers in remote villages, where even physical infrastructure is poorly developed.

In another private sector initiative, more than 40,000 e-chaupals established by ITC Ltd in rural areas of central India are providing market information that helps the company aggregate the demand for supply of quality inputs. Information is also provided about prices in different markets, making it easier for the farmers to make decisions on sale of their produce. Farmers' prosperity through better price discovery is beneficial to the company while creating a market for its goods (see Box 3.1).

These initiatives are discussed in more detail in the section, 'Creating New Market Infrastructure'.

Empowerment through market exposure and education

The Orissa Tribal Empowerment and Livelihoods Programme (OTELP), supported by the Department for International Development (DFID), International Fund for Agricultural Development (IFAD) and World Food Programme, is being implemented

in seven most backward tribal-dominated districts of Orissa. The services of Marketing and Research Team (MART), a private company with social objectives, were secured to enable the SHGs of tribal women to secure better prices for their non-timber forest products (NTFPs).

MART adopted a strategy of empowering SHGs through education. All the villages were provided with weighing machines to know the actual quantum of the products they were collecting, and thus decide the market price they could expect. The villagers were taken to the near by market places, including the district headquarters, to which they had never been exposed earlier. They were facilitated to directly interact and negotiate with the traders, and ascertain the price of different products. SHGs and Common Interest Groups (CIGs) were guided to purchase the collection of each household, and to ensure a viable sale of the commodity, directly sell in bulk to the traders as per the latter's requirement. This resulted in reducing the exploitation of the primary collectors by the middlemen. It also led to an appreciable increase in the income while helping the SHGs and CIGs to become sustainable community-based growth centres (see Box 3.1).

Influencing the market as a major player

The case of Janarth as discussed in chapter 2 showed how it impacted the local *mandi* by just participating in the market, and acting as a 'persistent bull'. The idea was to push the prices as high as possible without incurring large losses or requiring unmanageable levels of other costs or commitments. Janarth's engagement offered to the farmers a trusted outlet, and as a result large number of farmers started patronizing Janarth *adat* (commission agent). Though Janarth adopted a strategy fraught with risk, it was successful in enabling farmers to realize a better price by about 1-2%. For a single commodity such as pigeon pea, the total trade volume of the mandi was about Rs 400 million. This increase translated into a gain of between Rs 3.5 to 7.0 million for approximately 20,000 farmers of about 200 villages, who brought their produce to the *mandi* (see Box 3.2).

Box 3.1: Market Linkages for Marketing of NTFPs by Tribal Women in Orissa

During the pilot collective marketing initiative covering 56 villages spread over the four blocks of Kalahandi, Kandhamal, Koraput, Gajapati. MART played a key role in facilitating the interface among the traders, SHGs and CIGs. The interaction led to quality consciousness among the producers and collectors, and subsequently, price realization improved for all 13 commodities, ranging from 10 to 212%. The total turnover achieved in 2006 was Rs 2.305 million.

No.	Product	Villages Covered	Procure-ment Price	Sale Price	Total Quantity (quintals)	Total Turnover (Rs.)	% Increase on procurement Price
1	Siali Leaf	9	500	550	110.0	60,500	10.0
2	Mustard	15	1,700	1,960	120.0	2,36,200	15.0
3	Niger	33	1,700	2,000	284.0	5,82,200	20.0
4	Castor	6	1,750	1,910	10.0	19,100	10.0
5	Mahula		1,000	1,250	220.0	2,75,000	25.0
6	Mango Jelly	6	3,000	4,200	21.2	89,124	40.0
7	Oil Cake	3		150	13.6	2,043	100.0
8	Kandula	4	1,600	1,700	60.0	1,02,000	6.2
9	Cowpea	3	1,900	2,750	50.0	1,38,600	45.0
10	Cashew nuts	3	3,150	3,450	123.5	4,26,075	9.5
11	Pumpkin	5	80	250	85.6	21,400	212.0
12	Jackfruit	3	250	500	40.0	20,000	100.0
13	Tamarind			600	556.0	3,33,600	41.0
Total Turnover						**23,05,842**	

Source: Information shared by OTELP on Solution Exchange Network

Box 3.2: Janarth: The Persistent Bull!

Janarth, an initiative of Action Aid, was established in 1986 by Praveen and Usha Mahajan to work in over 100 villages in Gangapur tehsil, a chronically drought prone region of Aurangabad District, Maharashtra. Initially, Janarth set up several Agricultural Service Centres (ASCs) that provided agri-inputs and agricultural extension support to the farmers. However, it soon realized that something needed to be done to ensure that farmers realize a better price for their produce.

Market Engagement in Lasur Mandi

In 1996, Janarth took a seat in the local Agricultural Produce Market Committee's yard in order to engage in the market. It chose to be a 'deliberate and persistent bull' in all auctions; in order to push the price of the produce to the advantage of the farmer. The Janarth *adat* (commission agent), formally known as 'Janarth Marketing and Warehousing Services', was initiated with an initial support of Rs 7 lakhs from Action Aid.

The Lasur station *mandi* follows an open auction procedure. The commission agent gets a 3% margin on the value of goods sold and is required to pay the farmer for the lot the same day. Janarth's role as a persistent bull has proved beneficial because it acts as a counter-mechanism to the imperfections of the existing free market commodity trade locally. Janarth is trusted for its assurance in weight, quality assessment, payment terms, etc. This has influenced the other traders as well. Lasur mandi no longer witnesses allegedly exploitative behaviour. Praveen Mahajan believes that because of Janarth's efforts farmers realize a better price by about 1 to 2%. For a single commodity such as *turi* (pigeon pea), the trade volume of the *mandi* is about Rs. 40 crores. This translates into a gain of between Rs 35 and Rs 70 lakhs for the approximately 20,000 farmers of the region.

Mahajan attributes his success to the network of contacts developed over time. Personal rapport with some key players in the Mumbai market as well as some of the largest pulse millers of the region helped him because their tacit support matters a lot in the trade circles. Whereas the local farmers have no direct role in the operation of the *adat,* they indicate their participation by patronizing the shop. Such patronage enables Janarth to earn a commission of 3% on their goods and, thereby, stay afloat in the market.

Agro-Processing Unit

Spot margins in any commodity business are razor thin and can, at times, be negative. A single deal that goes wrong can set the operations back by a whole year. At the same time, if one has the capacity to either add value to the raw commodity or to hold it,

margins can improve. Also, the ability to add value increases the degrees of freedom with the market player, and fetches higher profits for producers. Janarth established Janarth Agro-processing Unit at Wadgaon some six kilometres from Lasur as a supportive activity for lending strength and stability to its *mandi* operations.

The unit was established with a soft loan of Rs 84 lakhs from a Dutch donor. It comprises a *dal* mill of the capacity 25 MT/day, drying yards, and godowns. Later, Janarth also installed a small unit of 5 MT/day capacity, a maize pulverizer as well as small machines for cleaning and polishing whole grains like sorghum and green moong. Janarth is keen that farmers add value to their crops by taking up simple processing themselves, individually or in groups. Even simple post-harvest steps such as sorting and grading of their materials can help them realize a better price.

Source: Abstracted from Rekha Mehra, Sanjiv Phansalkar and Mihir Sahana (2005).

Creating local market infrastructure

Local haats

Several development agencies working with tribal communities in the interior regions have faced the problem of a non-existent market infrastructure. In such situations, agencies such as Swadhina in Jharkhand, and BAIF in other tribal states have invested in creating local *haats*, which serve the needs of clusters of villages. These *haats* provide a source of livelihood to some, and access to local produce to others.

Local storage facilities

Poor storage facilities at the village level is also a reason for farmers' vulnerability in the market. In the AGROCEL case, partner Shell Foundation was willing to invest in godowns so that the organic cotton produced in the project could be stored, and the requirements of the market could be met when the demand came. MASUTA, the producer company of women's reeling and spinning groups, has established a separate company called Tasar Cocoon Development Company in collaboration with Jharcraft, (a federation promoted by the Government of Jharkhand) to store cocoons. Cocoons are produced seasonally, only in December, whereas reeling activity is carried out throughout the year.

Semi-processing to extend shelf-life of produce

Lack of storage infrastructure is a major problem in the hill states of north India. About 50% fruits and vegetables produced by mountain farmers go waste due to lack of storage and/or processing facilities. The surplus food is either fed to animals, or left to rot because there is no other outlet. In Balganga Valley of Tehri Garhwal region of Uttarakhand, a social entrepreneur has successfully disseminated solar drying technology among women farmers for fruits, vegetables, and spices. The cost of the prototype dryer ranges from Rs 2500 to 3000. In this intervention, eight women's groups have been trained in solar drying. The produce is marketed in niche markets in metros of Delhi and Mumbai. Villagers have also started consuming solar dried vegetables in six villages, thereby, improving their food security.

In Karnataka, farmers have been taught by Karnataka Watershed Development Society (KAWAD) to semi-process lemons in brine in order to extend their shelf-life. In this way, they could access distant urban markets, and negotiate better with large wholesalers and pickle producers.

Electronic commodity exchange

With the advent of ICT, creation of a new market infrastructure that is more inclusive than ever before became possible. MCX is India's leading electronic commodity exchange with about 70% market share in 2007. MCX's core business deals with price information. Established in 2003 by Financial Technologies India Ltd., the company had 600 centres and 21,000 trading stations by 2007. It was trading in 72 commodities, of which 28 were agricultural. Connectivity is provided through Very Small Aperture Terminal (VSAT), Internet, leased line, Community Technology Learning Centre (CTCL), etc. Farmers are provided real-time price, information on commodities through the company website, India Post (*Gramin Suvidha Kendra*) and Info Vendors.

On February 10, 2007, MCX and NAFED signed an MoU to set up a National Spot Exchange for Agriculture Produce (NSEAP). The concept of the NSEAP is to provide a national-level, electronic, institutionalized spot market to farmers. It provides a place where farmers can sell at the best possible rate and end users can buy at the most competitive rate. A delivery contract is signed, where a farmer delivers the produce at the nearest warehouse of the company and gets payment right there. In this system, the farmer stands to gain because the best price is offered by the end-users directly. As a result, income of the farmer can be increased significantly (often doubled) without increasing the consumer paid price.

MCX has now established National Bulk Housing Corporation, a sister company that

will help to make warehousing services more easily accessible to farmers. Banks have been linked to get loans for farmers. Information kiosks are being set up with the help of the Energy Research Institute (TERI), New Delhi.

E-choupal as an alternative market

ITC's e-choupals are also emerging as an alternative market infrastructure. The material handling systems at the ITC collection centre ensure that transport vehicles are able to directly unload their produce without spilling any grain, and a modern weighbridge ensures precise weighing. Although the prices offered by ITC are not much higher than those at the *mandi*, farmers choose ITC because the transactions are done closer to home, and the practices of weighing and quality assessment are more efficient and transparent. In the end, the farmers ends up saving as much as Rs 400-500/tonne for a crop such as soybean due to savings on travel and reduced wastages (see Box 3.3).

Box 3.3: E-Choupal: ITC's Rural Networking Project

The ITC group of companies, with a yearly turnover of Rs 7.5 billion, procures various agricultural commodities like soybean, coffee, and oil seeds for its agri-export division. Typically, a farmer sells his produce through a long chain of traders, including *kaccha adat* (small trader), *pakka adat* (large trader) *mandi* trader, and brokers, who finally negotiate sales to companies such as ITC. This long, time-consuming chain, results in high procurement costs for ITC, deterioration in the quality of the products, and lost profit opportunities for the farmers.

Intervention

The e-choupal system was introduced by ITC in June 2000. A *choupal* (village gathering place) was converted into an e-choupal by setting up a computer with Internet connectivity. An investment of up to Rs 1 lakh is needed to establish an e-choupal with dial-up connectivity and VSAT technology. E-choupals are operated by a *sanchalak* (operator), a literate person elected by the farmers of the village. He/she acts as an interface between the computer and the illiterate farmers, and retrieves information on their behalf. While ITC covers the cost of equipment, the *sanchalak* pays for day-to-day

operational costs, like electricity and Internet charges, which vary from Rs 3,000-8,000/yr. Training is given to the *sanchalak*, who also doubles as an ITC salesman for a commission of 0.5% per tonne of processed product.

Information that can be accessed from an e-choupal includes crop prices, weather, scientific farming practices, farmer peer groups, and soil-testing services. This online information is made available in Hindi. To sell his produce, the farmer carries a sample to a local kiosk and receives a spot quote from the *sanchalak*. If the farmer accepts the quote, he can then transport the produce directly to an ITC collection centre and get payment within two hours. The material handling systems at the ITC collection centre ensure that transport vehicles can directly unload their produce without spilling any grain, and a modern weigh-bridge ensures precise weighing. The transportation cost is reimbursed to the farmer. If the farmer is located in a remote area, he has the option of selling his produce to the *sanchalak* or to a nearby collection centre.

The farmers prefer this system to the *mandi* system, in which they had to wait for hours or even days before the produce was sold. In addition, transaction costs such as bagging, transportation, loading and unloading had to be incurred by the farmers. Commission agents at the *mandi* used a small weighing scale that was inaccurate and resulted in less revenue in proportion to the produce. Moreover, the wastage level was higher, because the agents tended to throw away some grain while evaluating its quality. In the case of soybean, for instance, the farmer saves about Rs 400 to Rs 500/tonne by selling though an e-choupal.

Impact

The project is recognized as India's largest Internet-based initiative, covering four million farmers growing a range of crops – soybean, coffee, wheat, rice, pulses, shrimp – in over 40,000 villages through nearly 6,500 kiosks across ten states (Madhya Pradesh, Haryana, Uttarakhand, Karnataka, Andhra Pradesh, Uttar Pradesh, Maharashtra, Rajasthan, Kerala, and Tamil Nadu). ITC plans to scale up the model to cover 15 states in the next seven years, reaching 100,000 villages.

Web-enabled, real-time data on crop prices give farmers an accurate picture of the prices they can expect from ITC, and from different *mandis*. This information enables them to become informed decision-makers and, thereby, sell their produce at a price that gives them a higher profit margin. With the participation of agricultural supplies companies in e-commerce, the farmers now can also conveniently order agricultural inputs.

Source: Subhash Bhatnagar et. al. (n.d.) and company website.

Tapping Market Opportunities

Market-directed production

Farmers often devote some or all of their land to the cultivation of cash crops. These are crops produced exclusively for the market. By studying the market requirements carefully, in terms of demand for particular varieties at particular time of the year, farmers can adjust their cropping and varietal decisions to maximize price realization and, hence, returns from farming. In Singbhum District of Jharkhand, an NGO Tagore Society for Rural Development (TSRD) took on the role of studying the market and advising tribal farmers who had taken up tomato cultivation. Changing the varieties grown by the farmers helped them secure better prices.

Market linkages

As discussed earlier, market linkages are of two types: a) backward and b) forward.

Backward linkages are linkages developed with suppliers, who agree to supply specified quantities (often in bulk) of inputs of specified quality, to primary producers. These supplies are associated with bulk discounts, the extent of discount depending on the nature of the market and the ability of the agency or CBO to negotiate terms with the suppliers. The scope for securing price advantage and discounts occurs because of the aggregation of demand for inputs, and dealing directly with large suppliers or producers themselves, bypassing the supply chain consisting of brokers and other traders. The Agribusiness Services Centres set up by AGROCEL were established to carry out this function. The success of the centres can be gauged from the fact that they grew from one centre in 1999 to 25 centres in 11 states within the span of a decade. The turnover grew from Rs 0.165 m in 1999 to Rs 241.9 million in 2007. The coverage increased from 500 to 45,000 farmers, covering a total land area of 5,40,000 acres.

Forward linkages are built with potential buyers, who would provide some kind of assurance to purchase specified quantities of the produce at a reasonable price, provided it meets the quality specifications. Producers are able to secure a better price collectively not only because they can bargain on quantity but also because they can by-pass several nodes of the value chain.

In the OTELP example, discussed earlier, MART helped establish market linkages between SHGs of tribal women and traders for marketing of NTFPs collected by the women. The results achieved in the pilot experiment prompted OTELP to scale up the intervention in all 396 villages of the project.

Contract farming and buy-back arrangements

Contract farming is defined as an agreement between farmers and processors and/or marketing firms for the scientific production, and supply of a specified agricultural product at a frequently and mutually pre-determined price. Technical guidance on cultivation practices, harvesting, storage, etc., and quality inputs at wholesale rate are assured by the contract to farmers (Gahukar 2007).

According to the contract, the farmer is required to plant the processor's crop on his land, and to harvest and deliver a quantum of produce, based on anticipated yield and/or contracted acerage. Towards this end, the contractor supplies the farmer with selected inputs, including the required technical advice. Thus, the contractor supplies all the inputs required for cultivation, whereas the farmer supplies land and labour. However, the terms and nature of contract differ according to the variations in the nature of crops, agencies, farmer and technologies, and the context in which they are practised (MANAGE 2003). Although both the parties can take legal help, success depends upon physical, social and cultural conditions, because all terms and conditions prescribed in the agreement are to be fully respected by the concerned parties so that the project gives an impetus to scientific planning and implementation of integrated crop cultivation.

Several private companies, including multinationals, have during the past decade attempted to use contract farming as a means of augmenting their supplies of raw materials of prescribed quality through the extension of improved agricultural techniques, either for exports or for agro-processing industries. In the cotton fibre sector, contract farming has been executed by Super Spring Mills in Tamil Nadu, Appachi Mills in Kerala, and Karnataka Textile Mills Association and Gokak Forbes in Karnataka, with the help of seed suppliers, insurance companies, banks, and produce purchasing organizations (Gahukar, 2007). In food crops, contract farming is being practised by multinational companies like Cadbury in cocoa; PepsiCo in potato, chillies and groundnut; Unilever in tomato, chicory, tea and milk; ITC in tobacco, wood trees and oilseeds, Cargill and Namdhari Seeds in seeds; United Breweries in barley, Nijjer Agro in tomato; Tarai Foods in vegetables; and M Todd in mint. Besides, Ballarpur Industries, JK Papers, and Wimco also practise contract farming in the procurement of eucalyptus and poplar trees (*Financial Express,* August 14, 2006).

Broadly, three types of contracts are being implemented:

a) **Procurement contract,** wherein only the sale and purchase conditions are specified.

b) **Partial contract,** wherein the purchaser provides some inputs and purchases the farm produce at predetermined prices.

c) **Total contract,** wherein the purchaser supplies and manages all inputs, but the farmer has to lease the land, and supply labour.

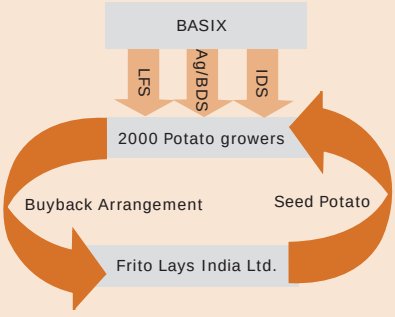
These contracts can be executed with individual farmers, a group of farmers, or their cooperatives.

The experience of contract farming in India so far has been mixed. A study conducted by Sukhpal Singh of IIM(A) (*Financial Express,* August 14, 2006) has dubbed it as a form of capitalist penetration in agriculture for capital accumulation and exploitation of farming sector by agri-business companies. According to him, the contracts are being loaded against the interests of farmers. However, the situation is not beyond redemption because the formation of 'new generation cooperatives' for increasing the bargaining power of producers can restore the balance, and draw the best out of contract farming. There are others such as Gahukar (2007), who see a bright future for contract farming, and strongly advocate its use to popularize organic crop production in India by taking advantage of the increasing demand throughout the world for organic food and fibre. According to scientists of MANAGE, enforceability and standardization of the contract agreements are the major bottlenecks plaguing contract farming. However, successful cases should encourage emulation for mutual benefits. Box 3.4 provides an example of a tripartite agreement between BASIX, PepsiCo, and the potato cultivators of Jharkhand, which appears to be working to the satisfaction of all parties.

Box 3.4: BASIX-Frito Lays Intervention

A comprehensive approach for marginal producers is clearly seen in aggregating them to take up contract farming of potato with buy-back arrangement with PepsiCo. The State of Jharkhand has good agro-climatic conditions and a great potential for vegetable cultivation. A large number of small and marginal farmers depend on vegetable production; their earnings so far are meagre, with proven market uncertainties. In this context, the collaboration between BASIX and PepsiCo for Frito Lays chip-grade potato farming was initiated in 2005-2006 with 216 farmers covering 80 acres of land. In 2006-07, seeing the significant increase in the crop yield, delivery of quality planting material at the field, the advantages of a pre-determined price, and easy access to credit and crop insurance, more than 1,100 farmers participated in this venture.

BASIX-Frito Lays Intervention



Particulars (2006 - 07)	Total
Total acreage	518 acres
No. of farmers	1,108
Fee paying registered farmers	907
No. of farmers who took loan	873
Total loan	Rs 42.7 lakhs
Net interest earned (3 months)	Rs 53,700
Ag/BDS revenue	Rs 2,72,100
Net Ag/BDS income	Rs 64,200
Total payment made to farmers	Rs 1.39 crores
Average payment made to farmers	Rs 12,974
Average price paid to farmers	Rs 7.60/kg

BASIX's collaboration with PepsiCo has opened the following livelihood finance services for the potato farmers:

- *Agriculture and Business Development Services:* comprises giving farmers a complete range of services by:
  - Establishing input linkages, that is, quality seed tubers, fertilizers, insecticides, fungicides, and micro-nutrients.
  - Establishing output linkages, that is, marketing of potato produced to Frito Lays.
  - Guiding farmers on various aspects of scientific crop management practices, including nutrient management based on soil testing, and integrated pest management (IPM) practices, coupled with regular visits of subject matter specialists with on-farm recommendations. Farmers are also trained in grading and sorting of the produce.
- *Financial Services*: comprises crop loan for potato cultivation in the form of kind, that is, seed tubers, for ensuring quality input, and also in cash by which farmers can meet their labour and other expenses. It also includes rainfall index-based crop insurance, insuring the lives and health of the farmer and spouse.
- *Institutional Development Services*: BASIX initiated the formation of Producers Groups in about 100 villages with the vision to form an able cooperative in the long run (after 5 years), which accesses, explores and enters into contract with different partners, including PepsiCo, to cater to their needs to become self sustainable.

Source: Vasumathi (n.d.)

Creating New Market Opportunities

A social entrepreneur is often confronted with a situation in which he/she has access to a new technology/process/product, which is potentially beneficial for the rural poor, the farming system, the environment, etc. Unfortunately, there are no takers! This situation may prevail because of lack of education, lack of appreciation of the potential benefits, or due to consumer resistance to change. The challenge in such a situation is to create a demand for the product/process through education, demonstration, and concept selling. Sometimes, the government steps in with suitable incentives, including subsidies. However, in the long run, the product/process must be accepted on its own merits and be economically viable for the potential user. One or more of the following strategies can be deployed depending on the nature of product/process and extent of consumer resistance:

a) Identifying and stimulating a latent demand
b) Overcoming consumer resistance
c) Creating favourable policy environment

Identifying and stimulating a latent demand

Tremendous success of India's Green Revolution in the 70s and 80s can be attributed to the establishment of an extension system that reached out to the farmers in irrigated areas with extension (educational) material, new agri-inputs, and demonstration of the package of practices in the field. This was backed by suitable governmental policy of providing subsidy on inputs such as chemical fertilizers, and distribution of free 'mini-kits' of new seeds for trials to farmers. Once the farming community realized the tremendous advantages of the new technology for improving productivity and economics, the technology spread rapidly, and India witnessed a farm productivity revolution.

By the mid-eighties, it became evident to some that the Green Revolution, which relied on the use of high dozes of external chemical inputs, was not going to be sustainable. Among those concerned with the sustainability of agriculture in India was a social entrepreneur, Hemangee Jambhekar. During her doctoral research, Jambhekar developed the technology of vermi-composting that offered a solution to the problem. By 1993, Jambhekar and her husband, Abhay, set up a private company to supply vermi-compost to farmers in and around Pune. But Hemangee and Abhay had a larger vision of making Indian agriculture sustainable, for which the technology had to be diffused as rapidly as possible. Today, more than 15 years later, vermi-composting has spread to every nook and corner of the country. Besides, thousands of women's SHGs have taken it up as an economic activity for self-employment. Whereas it took an army

of government extension workers to diffuse the chemical intensive technology during the Green Revolution, the technology to restore soil health through vermi-composting got diffused through a people-to-people process in about the same time. This success of diffusing small technology for sustainable agriculture, can be attributed to a unique strategy developed by the Jambhekars (see Box 3.5)

There are a large number of such latent needs in rural areas. Due to the low purchasing power of the rural consumer, and the spatial distribution over vast areas, private companies until recently tended to ignore the needs of this market. Therefore, C K Prahalad's arguments about the 'fortune' at the bottom of the pyramid (Prahalad, 2006), came as a revelation to many large domestic and multinational companies. Many such companies have since then focused their attention on getting a slice of this market through innovative approaches. People in remote villages, who lack basic amenities such as potable water, electricity, housing, etc., are willing to pay a small fee for these services, provided these meet their requirements. The company can make substantial profits in spite of low margins because of the large number of potential consumers. This can be achieved through innovation at all levels including product design, processes, systems, and business models, leading to quantum jump in the " price-performance envelop" (ibid.).

Overcoming consumer resistance

A consumer is usually unwilling to change a product, technology, or lifestyle unless he/she perceives distinct advantages of price, convenience, quality, fulfillment, etc. The normative appeal of a product or service is seldom sufficient for its adoption, especially if general awareness about the harmful effects of existing products/services in the market are low. Differences in resistance are encountered in the adoption of a single product as opposed to a package of practices involving a complete overhauling of the system as found by the first author in a study on ecopreneurship in the Indian context (Pastakia, 1998). The maximum resistance is found when the change implies embracing a new philosophy or outlook to life since this could mean drastically modifying consumption patterns and lifestyles. Some of the creative ideas for dealing with systematic change in the study were:

a) Using cultural symbols to package the technology
b) Harnessing energies of socio-religious movements
c) Highlighting economic benefits while making normative appeals
d) Providing a holistic vision to potential users

Box 3.5: Pioneering the Vermi-compost Industry: Hemangee Jambhekar

The Jambhekars believed that for new products such as vermi-compost, concept selling should precede product selling. Hemangee and her partners went to various meetings to sell the new concept of farming without chemicals to commercial farmers. They were very particular in clarifying that vermi-compost was not a substitute for chemical fertilizers. Rather, it was a component in a package of practices aimed at rejuvenating the soil, taking advantage of the local biomass, and other resources. The set of recommended practices was neatly packaged in local cultural symbols. Hence, the entire package of technology was summarized in six 'Gs', that is:

i. *Gandul* (earthworm)

ii. *Gavat* (biomass)

iii. *Ganga* (holy Ganges River, symbolizing water and purity)

iv. *Gai* (cow)

v. *Ganapati* (local deity symbolizing potency) and

vi. *Gauri* (local deity symbolizing prakruti, or nature)

The package emphasized the importance of the inter-linkages between soil, water, biomass, livestock, and earthworms in restoring soil health while appealing to the religious sentiments of the potential users. The Jambhekars backed up their sales with competent after-sales services and trouble-shooting. Many of the subsequent improvements in the product and process were a result of this trouble-shooting effort.

A few months after setting up the enterprise, the Jambhekars made a strategic shift, and started selling the technology to enterprising farmers, who would supply vermi-compost to neighbouring farmers. Instead of supplying vermi-compost they started supplying the earthworms directly to the farmers. Hemangee's strong background in research enabled her to establish quality standards, not only for her own enterprise but for all other entrepreneurs who followed. Later, the same strength was used for product differentiation, that is, to develop vermi-compost tailor-made to the specific requirements of crops or problem soils.

Source: Pastakia (1998)

Creating favourable policy environment

The Indian government has, in the past, made a conscious effort to promote certain technologies to rural communities, with the help of subsidies, or by banning/restricting the use of certain harmful technologies. Examples of subsidies to promote products in rural areas include solar cookers, solar lamps, bio-gas plants, drip irrigation, smokeless stoves, etc. These efforts have met with partial success in some cases, and failure in others. This is largely because subsidies alone cannot change the mind-set of the consumer or producer. Subsidy is only a tool, which provides economic compensation to early adopters in the short run. Banning of outdated and non-sustainable technology has produces better results. For example the state government of Orissa banned the use of top soil for brick manufacture within a 70 km of radius of thermal power plants. Consequently over 50 fly-ash brick making units have been founded in the state.

In the long run, the technology/product must out-perform existing ones on a range of criteria, including cost and efficiency. This should be accompanied with education about the benefits of the new system/product/technology. If the policy environment is not favourable, the social entrepreneur must lobby to make it more so.

Working with Entire Value Chains

Among all market-led interventions, the most challenging is to work with the entire value chain, often generating livelihoods at different nodes of the chain. Only a handful of social entrepreneurs have attempted this task so far. The results show that the efforts made more than justify the outcomes and impact.

Working with entire value chains, however, is not for the faint hearted! It calls for a long-term commitment on the part of the social entrepreneur, and a sustained effort in working with various stakeholders. It presupposes a certain amount of expertise in dealing with markets and entrepreneurial skills in building value chains to meet the precise requirements of the market.

Given the growing importance of developing pro-poor value chains, this subject is dealt in more detail in the subsequent two chapters of the volume.

End-notes

1. PLC for Coastal Livelihoods, which works with coastal communities in the Bhavnagar-Amreli coastal belt, was promoted in 2007 by the Ahmedabad-based NGO, Utthan, as a unique people's institution with professional staff, in which people set the agenda.

4 Understanding Value Chains

In this chapter, we provide a set of tools that can be used to assess both supply chains and value chains before designing value chain interventions (VCIs). Later, these very tools can also be used to assess the effectiveness of the VCIs. The menu of tools and methods described can be divided into two broad groups: a) mapping tools and b) tools for economic analysis of value chains (Box 4.1):

Box 4.1: Menu of Tools for Value Chain Analysis

A Mapping Tools
- Mapping value chains
- Actor-function matrix (method 1)
- Actor-function matrix (method 2)
- Mapping institutional arrangements

B Economic Analysis of Value Chains
- Price spread analysis
- Gross margin analysis
- Ruling constraints analysis

C Socio-political Analysis

Mapping Tools

A value chain can best be understood by mapping its various dimensions. The use of three mapping tools is described below.

Mapping of value chains

To prepare the value chain map in a given sub-sector, it is useful to review the principal *functions*, *participants*, and *channels* in the value chain because:

a) Functions describe the transformations of the commodity, product or service that takes place.
b) Participants indicate who perform them
c) Channels describe how products flow among the participants — who buys from whom, and how the network of interdependence is created and sustained.

The steps and conventions for developing a value chain map as described in the GEMINI Handbook (Haggblade and Gamser 1991 in Datta, Mahajan and Thakur 2005) are listed below. These conventions are useful in ensuring a clear map that can form the basis of future analysis and decision-making. Figure 4.1 illustrates value chain mapping conventions in the cotton sub-sector (AGROCEL case).

BOX 4.2: Steps for Creating a Value Chain Map

1. On a blank piece of paper, list all functions one above the other on the left side, starting with the base raw material at the lowest corner.
2. List all final markets across the top.
3. Map various participants, who perform these functions, in the rows in which the functions are listed.
4. Draw arrows to describe product/raw material flows among participants.
5. Define principal channels.
6. Review sub-sector boundaries.

Source: Datta, Mahajan and Thakur (2005)

Conventions:

1. All stages in the value chain are written in the left-hand column, bottom up. The most primary ingredient is written in the lowest line with the ultimate product consumed by the consumer in the top line.

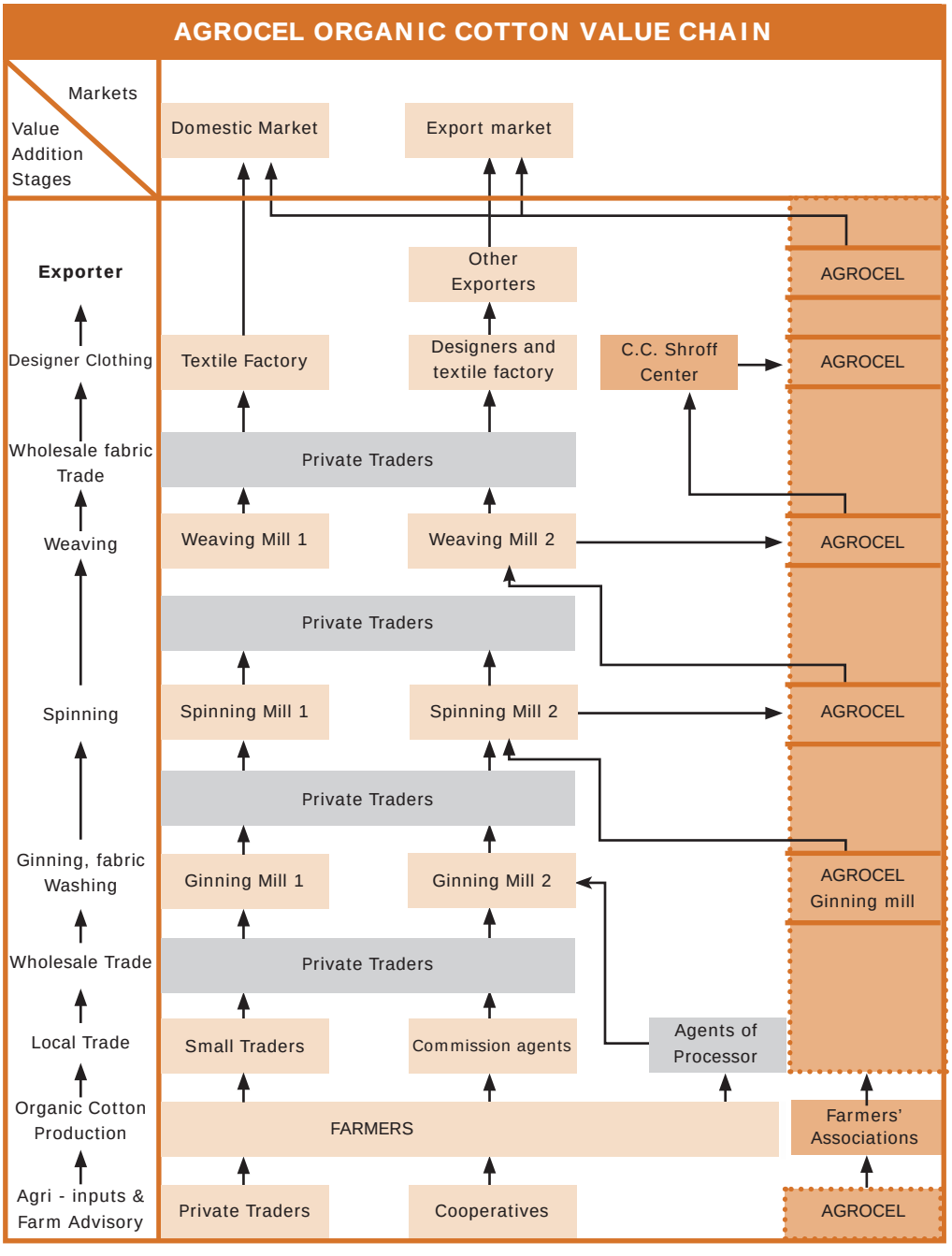
2. Various players engaged in one value addition activity are written in the horizontal axis along with the stage of the value addition mentioned in the left-hand column. In this illustration, for example, private traders, cooperatives and AGROCEL are engaged in seed, fertilizer, bio-fertilizer, and vermi-compost supply services.

3. Vertical boxes are used to show players performing multiple roles in the value chain. In this example, AGROCEL is engaged in all the stages from providing technical guidance to farmers for cultivation of cotton through various stages of yarn and fabric-making to designer clothing and export.

4. Movement of products is shown with the help of arrows.

5. If some parties are not engaged in one particular part of the value chain, it is demarcated by a dash.

Figure 4.1


AGROCEL ORGANIC COTTON VALUE CHAIN
Markets
Value Addition Stages
Domestic Market
Export market
Exporter
Other Exporters
AGROCEL
Designer Clothing
Textile Factory
Designers and textile factory
C.C. Shroff Center
AGROCEL
Wholesale fabric Trade
Private Traders
Weaving
Weaving Mill 1
Weaving Mill 2
AGROCEL
Private Traders
Spinning
Spinning Mill 1
Spinning Mill 2
AGROCEL
Private Traders
Ginning, fabric Washing
Ginning Mill 1
Ginning Mill 2
AGROCEL Ginning mill
Wholesale Trade
Private Traders
Local Trade
Small Traders
Commission agents
Agents of Processor
Organic Cotton Production
FARMERS
Farmers' Associations
Agri - inputs & Farm Advisory
Private Traders
Cooperatives
AGROCEL

Actor-function matrix - I

This is a simple matrix with functions listed on the vertical axis and actors performing those functions on the horizontal axis. Actors could include PIs, nano-entrepreneurs and service providers who work in tandem, external facilitating agencies, private enterprise with social goals, research institutions, fair-trade agencies, etc. Functions may include, a) commercial functions, b) developmental functions, and c) welfare functions.

Commercial functions: All functions related to the running of the enterprise such as financing of enterprise, production planning, technology inputs, marketing, logistics, sales, etc. are included under this heading.

Developmental functions: This largely refers to the task of building up the value chain from the grassroots by providing training, and building the capacity of the local communities/ artisans to produce as per the requirements of the market.

Welfare functions: In all collective enterprises, meeting the welfare needs of the community is an important function. This could include meeting expenses for health, insurance, education of children, etc. Traditionally the cooperative form of institution has tried to address this need by creating welfare funds out of the profits of the cooperative. This tends to lock up the capital for "non-productive" purposes making it difficult for the cooperative to compete in the open market. Social entrepreneurs such as the ones discussed in this volume have come to the conclusion that separating out the three types of functions under different types of institutions (each institution matching the type of function) makes it possible to do justice to each type of function.

If a more detailed matrix is considered desirable, important tasks may also be listed under different functions (see for example the matrix provided in the case study on tasar silk, in Part 2 of this volume). One advantage of the matrix is that it provides a summary of the various functions/tasks being performed in the value chain to produce and convert the product/service until it reaches the end-user. The matrix can also be used for the following purposes:

- To show the contribution of primary producers in the value creation.
- To compare the situation with and without an intervention
- To show the empowerment of primary producers over time as they take on more functions and tasks from the support organization, thereby earning greater autonomy.
- As a planning tool to determine future division of roles and future empowerment of primary producers.

Table 4.1-A shows the template of the matrix for Rangasutra (see case study, Part 2, this volume), which has built a value chain of artisan communities from different parts

of the country to produce fashion garments sold in up-market retail stores such as FabIndia, and sold through fair-trade channels abroad.

Table 4.1-B provides a projection for the next three years for the Rangasutra intervention. As the table shows, Rangasutra will work directly with artisan groups in future and, therefore, NGOs may not have much role to play other than taking care of the welfare functions. Rangasutra's producer company may increase its own line of products through its exclusive shops and explore new markets on its own. It will develop in-house design capabilities, and not have to rely on design inputs from clients.

Table 4.1-A: Actor-Function Matrix of Rangasutra VCI

Functions	Actors					
	Artisan Groups	Associated NGOs	Rangasutra Private Company	Rangasutra Producer Company	Partner Institutions (FabIndia, Aavishkaar)	Fair trade Buyers (Export)
Design inputs			√	√		√
Production planning	√	√	√	√		
Aggregating and coordinating production			√	√		
Technology inputs to improve processes	√	√	√	√		
Credit and finance		√	√		√	
Quality control	√	√	√	√		
Logistics function		√	√	√		
Marketing functions			√ (HVLM markets)	√ (LVHM markets)	√ (FabIndia) (HVLM markets)	
Customer services			√	√	√ (FabIndia)	
Welfare functions for artisan groups		√		√		

HVLM = High volume low margin; LVHM = Low volume, high margin
Source: Case study on Rangasutra (see Part 2).

Table 4.1-B: Rangasutra Actor-function Matrix Projected (3 years)

Functions	Actors				
	Artisan Groups	Associated NGOs	Rangasutra Private Company	Rangasutra Producer Company	Partner Institutions (FabIndia, Aavishkaar)
Design inputs	√		√	√	
Production planning	√				
Aggregating and coordinating production			√	√	
Technology inputs to improve processes	√		√	√	
Credit and finance	√		√	√	√
Quality control	√		√	√	
Logistics function	√		√	√	
Marketing functions	√		√	√	
Customer services			√	√	√
Welfare functions for artisan groups		√		√	

Actor-function matrix - II

An alternative way of mapping actors and their functions in a given intervention is to develop the following three columns:

a) Column I showing the nodal points of the value chain in increasing order of value addition.

b) Column II showing the institutions/individuals that perform key functions at each of these nodes.

c) Column III showing the functions or broad roles of each actor in the chain.

Table 4.2 shows such a mapping for the tasar silk intervention of PRADAN in Jharkhand. The main advantage of this form of presentation is that the roles/functions of different actors are spelt out with greater clarity. The disadvantage is that the comparison of matrices over time and across value chains is more cumbersome than in the first method of presentation.

Table 4.2: Actor-Function Matrix of the Tasar Silk Value Chain

No.	Nodal Point in Value Chain	Actors (Institutions/ Individuals)	Functions (Broad Roles)
1	Nucleus seed production	Central Silk Board	To maintain and supply nuclear seed for production of basic seed and subsequent production of DFLs
2	Basic seed production	Grainage entrepreneurs	To produce own supply of quality seed DFLs for the production of DFLs
3	Grainages or DFLs production	Grainage entrepreneurs	To provide quality DFLs to cocoon rearers
4	Cocoon production	Individual rearers drawn from SHGs; guided by local service providers and belonging to the cluster-level Samiti	To produce cocoon and supply to the next level in the value chain
		Tasar Vikas Samiti at the cluster level with 300-350 rearers	To aggregate the production of tasar cocoon for selling in the open market as well as to the producers' company
		MASUTA producer company at the multi-state level	To procure cocoons, sort and store these, and supply to reeling units
5	Yarn production	Mutual Benefit Trusts at village/cluster level with about 30 women reelers	To manage the reeling centres
		MASUTA producer company with membership of over 60 MBTs at the multi-state level — majority being in Jharkhand	To supply quality cocoons in adequate quantity to the reeling units
		Tasar Cocoon Development Company, joint venture of Jharcraft (federation of weavers promoted by state government), and MASUTA	To procure cocoon requirements for the entire year during the season in December, and to stock it and supply to reeling units of both MASUTA and Jharcraft.
6	Fabric production	MASUTA producer company	To market or facilitate marketing of yarn to weavers after grading and quality control
		Eco-Tasar Silk Pvt. Ltd. a private company at the national level, promoted by MASUTA (majority share capital) along with a marketing professional	To get fabric made as per market requirements by outsourcing to weavers, dyers, finishers, and getting inputs from designers
7	Marketing	Eco-Tasar Silk Pvt. Ltd., a private company	To cater to the export and domestic market for yarn and fabric

Mapping of institutional arrangements

In a mature intervention covering several nodes of the value-chain, the institutional arrangements can be quite involved. In such a case, it is useful to map the institutions/ functionaries active at different nodes and levels of the value chain, and to bring out their inter-relationships. A value chain map is expected to perform the same function, but suffers from certain limitations :

a. It does not show flows and relationships other than material flows.

b. It does not distinguish between commercial, developmental and welfare functions.

c. It does not show the role played by a host of institutions with whom linkages are formed to provide different support services to different actors in the value chain.

To overcome these limitations, and present a more cmphrensive picture of institutional arrangements in any maket-led intervention, an alternative method is proposed.[1] The method comprises a template with a vertical axis showing various functions or nodes of the value chain, and the horizontal axis showing the levels of operation (from village to national). The institutions are mapped in the different cells.The case of Tasar silk value chain is used to illustrate this method (Figure 4.2)

Conventions

1. The sector development and welfare functions are separated from the main commercial functions and shown below the latter on the lower end of the matrix.

2. Linkages with financial and resource institutions are shown by creating a column on the extreme right for such institutions.

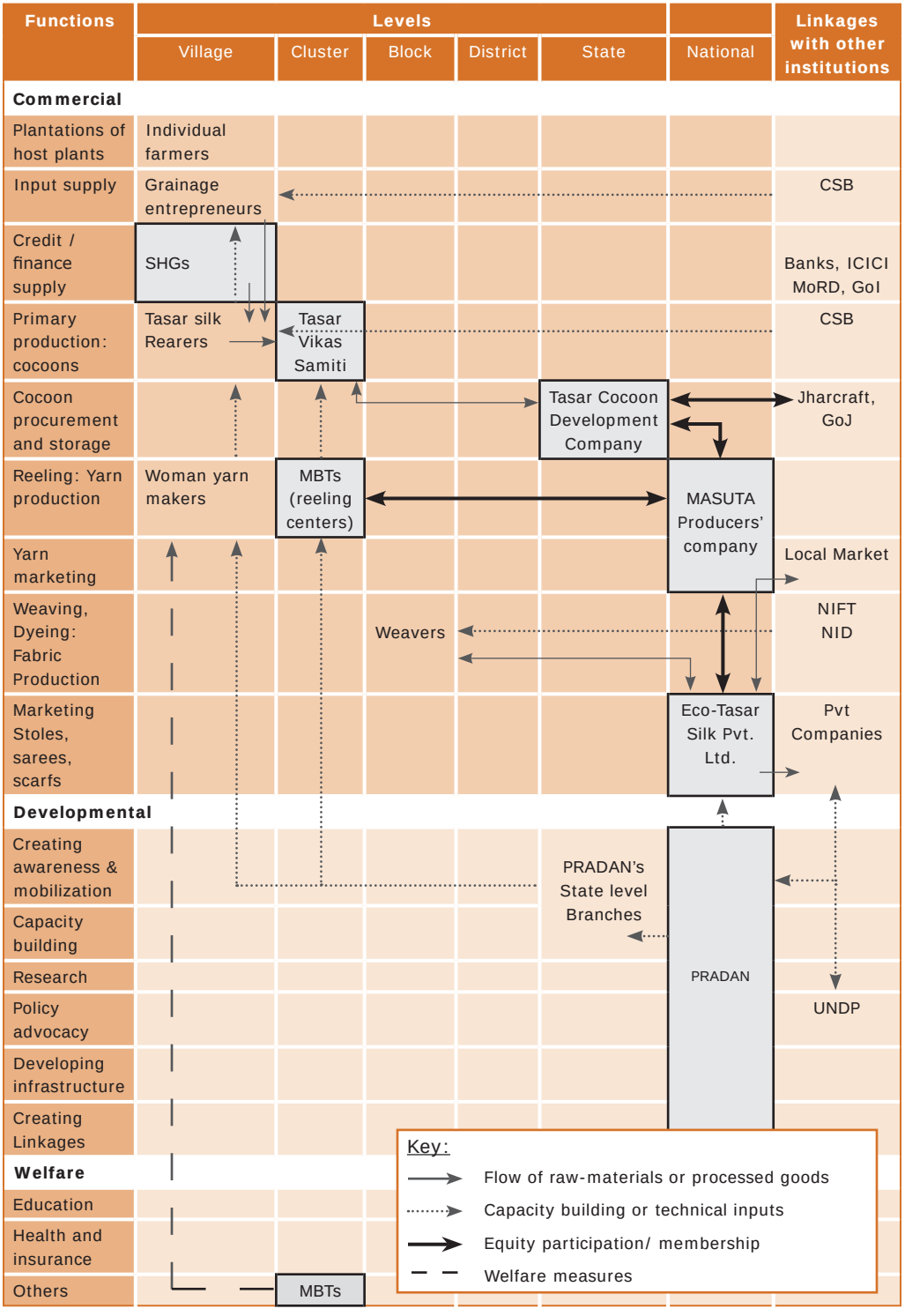
3. Hence, the arena in which the main action takes place is captured in the sub-matrix constituting value-chain functions (y-axis), and levels of operation from village to national level (x-axis).

4. Relationships between institutions are shown through arrows. Different types of arrows can be used to distinguish between material, cash, and information flows.

5. Key institutions may be shown in a box to highlight their importance.

6. If a given institution performs multiple functions, the relevant cells can be merged.

Figure 4.2: Mapping of Institutional Arrangements – Tasar Silk



Economic Analysis of Value Chains

While mapping techniques help to understand what is happening in a value chain, these are not enough for making decisions regarding possible interventions. Given below are some of the tools that enable social entrepreneurs to take decisions regarding the design of VCIs.

Price spread analysis

This tool is used to quantify the share of the terminal price at different nodes of the value chain. It shows the proportion of earnings of different functionaries when compared to their contribution in the value chain. Hence, it becomes a useful tool in the hands of the social entrepreneur to quantify the share of the primary producer and other targeted producers of the value chain in the terminal price. An illustration of the price spread in the tasar silk sub-sector is provided below. Tables 4.3 and 4.4 show the price spread, and share of primary producers in the terminal price without and with the intervention, respectively.

These tables reveal a startling picture. They effectively bring out the story of a tireless, twenty-year effort on the part of PRADAN professionals to enable primary producers to gain control over the tasar silk value chain. They show how the intervention has altered the power structure in the value chain, created spaces for primary producers to enter the value chain through new technology, and created new people's institutions that replaced some of the earlier players such as agents and fabric wholesalers. As a result of these efforts, today the target population's share in the terminal price (in this case, the price of silk sarees, stoles, scarves, etc.) has more than doubled to about 75%. Such a dramatic increase in control over the value chain was possible because the steps in value addition did not have high entry barriers such as high capital cost, high technology, etc. Innovation in developing and diffusing decentralized and appropriate technology was the key to establishing a people-centred value chain.

Gross margins analysis

Merely looking at the share in terminal price is not enough since business decisions must be made on the basis of profitability. As a first cut, it is convenient to use simplified gross profit calculations to determine where most profits are being made. Is it in the supply of inputs, in production, in wholesale, or retail of the product? That indication might provide some ideas of the opportunities that exist, and interventions that are possible. If, for instance, the gross profit that the retailers make is ten times that of the gross margin of the producers, it is an indication that there might be opportunities for improving the position of the producers by moving upstream.

Table 4.3: Price Spread Analysis — Without Intervention

No.	Name of Actor in the Value Chain	Share of Terminal Price (Rs)	Share of Terminal Price (%)	Target Population's Share of Terminal Price
1	Silkworm rearer	4,000	22.2	22.2
2	Petty trader	2,000	11.1	
3	Cocoon hoarder	2,500	13.9	
4	Weaver	1,500	8.3	8.3
5	Agent	1,500	8.3	
6	Fabric wholesaler	2,000	11.1	
7	Retailer	4,500	25.0	
	Total	18,000	100.0	30.6

Table 4.4: Price Spread Analysis — With Intervention

No.	Name of Actor in the Value Chain	Share of Terminal Price (Rs)	Share of Terminal Price (%)	Target Population's Share of Terminal Price
1	Grainage entrepreneur	450	2.5	2.5
2	Silkworm rearer	6,050	33.6	33.6
3	MBT of yarn producers	250	1.4	1.4
4	Reeler or yarn producer	2,513	14.0	14.0
5	MASUTA producers' company	713	4.0	4.0
6	Weaver	2,025	11.3	11.3
7	Eco Tasar Private Ltd.	1,500	8.3	7.47†
8	Retailer/ Eco Tasar retail outlet	4,500	25.0	0.73*
	Total	18,000	100.0	75.0

†MASUTA's share in Eco Tasar Pvt. Ltd. company is 90%.
**Based on proportion of total sales that is retailed.*

Source: Case study on tasar silk intervention (see Part 2).

Gross margin or profit is simply defined as sales minus direct costs. To make a true assessment of profitability, one should consider all the indirect costs as well. However, such detailed information is difficult to obtain and, therefore, as a first cut, including only direct costs will suffice to get a rough idea of the profitability at different nodes of the supply/value chain.

Direct costs are those costs that can be directly attributed to a product — the material and labour costs. The easiest way to define whether a cost is direct or indirect is to ask oneself the following questions:

- If I produce nothing, do I still face these costs?
- If I double my production, are the costs double too?

If the answer to the first question is in the affirmative, the cost is indirect. If the reply to the second question is positive, it indicates that the cost is a direct cost. For instance, the wood that a carpenter uses, or the labour required for sawing or sandpapering are examples of direct cost. The electricity consumed at the carpenter's workshop and depreciation of his machinery are examples of indirect cost.

Gross margin Percentages:

Simplified Gross Margin (SGM) = Selling Price – Direct Costs

Because it is easier to compare results when seen in terms of percentages and not rupees, we may express SGM as a percentage of the selling price.

SGM% = SGM/Selling Price x 100

Two illustrations are provided below to demonstrate the use of this tool. The second illustration demonstrates, in addition, the use of material balance as a preliminary step in margin analysis.

Illustration 1

Let us look at the production of one type of bread in the chain.

Farmer:	Supplier of raw materials
Flour mill owner:	Producer
Bakery:	Retailer

The farmer sells 10 kg of wheat to the flour mill at a price of Rs 200. He incurs a direct cost of Rs 100 in producing the wheat. The mill owner converts this into flour, and sells it to the bakery owner at a price of Rs 300. The loss in conversion at this stage can be considered to be negligible. The labour in handling the wheat during milling can also be neglected. The baker uses the flour to make 50 loaves of bread and sells at a total price of Rs 500. The labour cost of kneading and baking are excluded, and the cost of other ingredients such as yeast are minimal and can be neglected too. The SGM can be calculated, as shown in the Table 4.5.

Table 4.5: SGM Calculations

Node in Supply / Value Chain	Direct Costs (Rs)	Selling Price (Rs)	SGM (Rs)	SGM (%)
Farmer	100	200	100	50%
Flour-mill owner	200	300	100	33%
Baker	300	500	200	40%

In the above calculations, the SGM% is the highest for the farmer and lowest for the mill owner. Should the mill owner, therefore, start producing wheat? Or if he is not from the farming community, should he start a bakery? Or should he take over both the functions? Assuming that the direct costs remain the same, the gross margins for different alternatives can be calculated as shown in Table 4.6.

Table 4.6: SGMs for Various Alternatives

Alternative	Direct Costs (Rs)	Selling Price (Rs)	SGM (Rs)	SGM (%)
Status quo	200	300	100	33%
Milling plus cultivating wheat	100	300	200	67%
Milling plus bakery	200	500	300	60%
All three functions in the supply chain	100	500	400	80%

The calculations show that with each additional node in the chain the mill-owner's profitability goes up. However, the decision to expand into other functions may not be as straightforward. What about the indirect costs? The mill owner would also need to look at other aspects such as efficiency and scale. What would be the quantum of wheat he would need to produce to meet his yearly requirements? What would be the additional investments needed in setting up a bakery? Will there be a suitable market for the bakery products in the same town? What is the expertise of the mill owner? If he lacks the expertise to run a bakery, what would be the additional cost of hiring a baker? Some of these factors may pose themselves as entry barriers for the mill owner, and prevent him from taking up additional functions. A realistic assessment of entry barriers, potential opportunities, and competency of the entrepreneur would ultimately count in making the right decision. A more detailed profitability analysis after considering the indirect costs would also be needed before making the final decision.

Illustration II

In the previous illustration, we had assumed that materials do not undergo any loss during conversion. We had also assumed other costs to be minimal in order to simplify

the case for the sake of understanding. However, in practice, things are seldom so simple. The following is a real-life example with simple assumptions about conversion ratios during value addition and other direct costs (Anish Kumar, 2009).[2]

Yasin, a chicken wholesaler, buys broilers from farmers right at the farm gate for Rs 45/kg and supplies these to the retailers for Rs 50/kg. The farmer requires raw material worth Rs 40 to produce one kilo of live chicken. The retailer sells to hotels live processed chicken at Rs 70/kg, and dressed chicken at Rs 150/kg. A diner in the hotel gets a plate of chicken for Rs 80, which uses 250 gm dressed chicken. In addition, the following data is provided.

- A plate of chicken uses spices, oil, etc., worth Rs 20.
- The ratio of dressed yield to live chicken is 50%.
- The weight loss at the retail point is 10%, and for Yasin it is 5% from farm gate to supply point.

While carrying out the gross margin analysis of a value chain, it is useful to first work out the *material balance*, that is, to show the conversion ratio of material as it moves from one stage of value addition to another. Without considering the weight loss during conversion, it would not be possible to get an accurate estimate of the direct costs. Table 4.7 shows the material balance for the illustration.

Table 4.7: Material Balance

Node of Value Chain	Conversion Loss	Weight of Material
Consumer	-	1 kg (4 plates)
Hotel	100%	1 kg dressed chicken
Retailer	10%	2 kg (approximately)
Wholesaler	5%	2.223 kg
Farmer	-	2.340 kg

The margin analysis for each actor in the chain can be worked out as shown in Table 4.8. As the table shows, the retailer makes the most money in the chain, with a share of 63.92% of the total gross margin, and a gross margin to sales ratio of 66.7%. The next best position is that of the hotel owner, who earns a share of 28.76%, whereas the earnings of the wholesaler and farmer are very poor indeed. Hence, if the farmer or the wholesaler wants to improve his/her profitability, he/she should explore the feasibility of moving upstream into the retail business.

Table 4.8: Margin Analysis for Poultry Illustration

Actor	SP (Rs/ Kg)	CP (Rs/ Kg)	Sale Value (4 plates)	Direct Cost (Rs)	Other Direct Costs (Rs)	Total Direct Costs (Rs)	Gross Margin (Sales – TDC) (Rs)	Margin as % of Sale Value	Share in Total Margin (%)
Hotel	320	150	320.00	150.00	80.00	230.00	90.00	28.13	28.76
Retailer	150	50	300.00	100.00	-	100.00	200.00	66.67	63.92
Wholesaler	50	45	111.15	100.04	-	100.04	11.15	10.03	0.035
Farmer	45	40	105.30	93.60	-	93.60	11.70	11.11	0.037

Ruling constraints analysis

The decision to intervene in a given node of a value chain or supply chain would depend upon a variety of factors as shown in Box 4.3 However, a systematic assessment of the ruling constraints at each node should precede any design for an intervention. Ruling constraints refer to those constraints that hamper or impede the performance or efficiency of the functionaries at a given node. For instance, the household poultry farmers in Jharkhand had no access to supply of quality inputs (feed, day-old-chicks) and veterinary services, which affected their productivity. PRADAN organized the primary producers into cooperatives, which began to organize these services at the doorstep of the women poultry farmers. Similarly, a major constraint at the wholesaler level could be access to working capital. An assessment of the incremental costs involved in removing the ruling constraints, and the estimated gains in terms of profitability, employment generation, self-employment, etc., of the target population would enable the social entrepreneur make the right decision.

If the share of primary producers is out of proportion to their contribution there is a case for intervention. Some functionaries may be extracting a disproportionate share of the terminal price whereas their actual contribution to the value addition process may be only nominal or notional. In such cases, there may be a strong case for giving them a meaningful role through capacity building or eliminating/by-passing them altogether. Most of the social entrepreneurs contacted by the authors were of the view that it is better to work with existing actors in the value chain, and help them improve their efficiencies through new technology, designs, skills and management practices rather than exclude them.

Box 4.3: Criteria for intervening in a given node of the value chain

- What are the ruling constraints at the given node?
- What is the scope of improving efficiency through either new technology and/or better management?
- What is the extent of value addition taking place at the given node, and its potential contribution to increasing the share of the primary producers in the terminal price?
- What are the opportunities for improving profitability at different nodes as revealed by gross margin analysis of the value chain?
- What is the extent of additional livelihoods that may be created either in the same node or downstream nodes because of the intervention?
- Will controlling the next node help to stabilize price realization and ensure the economic viability of primary producers?
- What are the risks involved, and the capacity of the social entrepreneur as well as the people's institutions to take those risks?
- What are the investments needed, and the capacity of the social entrepreneur to raise the necessary investment?

Socio-political Analysis

The political approach to VCA assesses governance by exploring power relations between the different parties involved in any transaction - a critical issue when looking at barriers to entry for poor producers (Gereffi et. al., 2005). Analysis of power and governance investigates power within production and exchange relationships across the value chain, including the power to set market prices and bargain as well as indebtedness and sub-optimal contracting (Gammage, 2009).

Socio-political analysis of value chains is as yet in its infancy and robust tools are in the process of being evolved. For instance the USAID initiated several studies to assess the social and gender dimensions of value chains under its programme "Greater Access to Trade Expansion (GATE) between 2004 and 2008 (ibid.). In the mean time, existing tools such as stakeholder analysis (Annexure 5, volume IV) and actor-function matrix (chapter 4) can be gainfully adopted for the purpose.

End-notes

1. The method presented here is a modified version of the original that was developed by Pastakia and Datta (2007) during the course of an e-group discussion on the Solution Exchange Network of the UNDP.

2. Based on training material developed on VCIs by Anish Kumar, PRADAN, for vikasbazar.net, January 2009.

5 Strategies for Value Chain Interventions

In this chapter we discuss the strategies in use for creating pro-poor value chains. We discuss six different strategies based on the analysis of cases presented in this volume (part 2). There could be many more. As the research in this field develops, more such strategies will be brought to light.

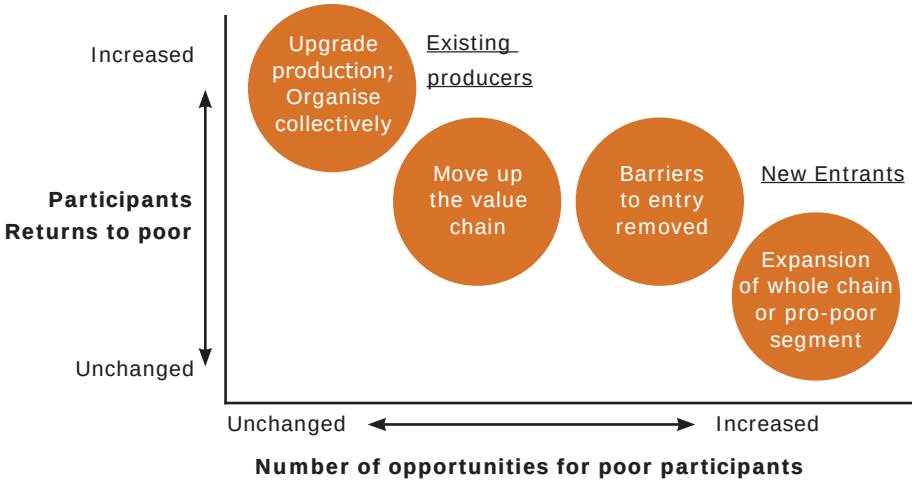
Opportunities for creating pro-poor value chains

To recapitulate, we may recall our definition of pro-poor value chain:

A market based intervention that looks at the entire value chain as an opportunity to generate/strengthen livelihoods for the poor, while creating value i.e. increasing the overall productivity and delivering quality products and services to the end user/ customer.

As pointed out by Ashley and Mitchell (2008), pro-poor VCIs aim to intervene at key points in the supply/value chain so as to change how they operate and improve the performance of the chain from the perspective of the poor. Based on a study of pro-poor VCIs in the tourism sector the authors identified four main strategic changes in the value chain which could benefit the poor (see Figure 5.1). While two of these changes help existing poor producers to augment their income the other two enable new entrants to join the value chain.

Figure 5.1: Value chain changes that increase participation of poor



In the above study, the authors assumed that social entrepreneurs work with existing value chains to upgrade them, while looking for opportunities to increase the participation of poor households. Our documentation shows that sometimes social entrepreneurs may decide to create entirely new value chains rather than to work with existing ones (see typology of VCI strategies in Table 5.1).

Table 5.1: Creating Pro-poor Value Chains: A Typology of Strategies

No.	Strategy type	Examples
A	**Working with existing value chains**	
1	Reviving a sick value chain	BASIX's intervention in dairy value chain in Andhra Pradesh
2	Reconstructing a value chain	PRADAN's intervention in tasar silk value chain in Jharkhand
3	Leveraging a value chain	AGROCEL's strategy while creating a value chain for organic cotton garments
B	**Creating a new value chain**	
1	Linking distant consumers of specific value orientation with dispersed marginal producers	Community Friendly Movement's intervention to link rural artisans with fair trade consumers in the US; Rangsutra's collaboration with FabIndia to link poor traditional artisan groups in the handloom and textile industry with ethnic fashion conscious urban consumers in India and abroad.
2	Creating a network of decentralized value chains	SEWA's RUDI Bazar, an intervention to create decentralized value chains of processed food commodities; BAIF's intervention in creating local value chains for supply of vermicompost; Value chains for seed production by farmers' producer companies promoted by ASA under DPIP in Madhya Pradesh.
3	Creating ICT based value chains in the service sector	Source for Change, an all women rural BPO in Rajasthan

These strategies are not mutually exclusive and therefore, more than one could be applicable in a given situation. For instance, in the process of reviving a value chain, it may also be necessary to add or subtract a node, which means modifying or reconstructing the chain. Similarly, it would be possible to adopt the strategy of leveraging in one part and modifying in another part of the same value chain. We now discuss each of these strategies with suitable examples.

Working with existing value chains

It is usually a good idea to work with existing value chains especially if a high proportion of poor are involved and it offers considerable scope for up-gradation. It should be noted that the effort to upgrade a value chain often leads to innovative product and/or process development, and deployment of innovative production, marketing, systems and organizational strategies. Inadvertently, such innovations may change the structure and processes of the value chain completely. It may also result in the identification of new target customers leading to creation of a new value chain or rather a new avatar of the previous value chain. In such cases the distinction between working with old and new chains becomes fuzzy.

Reviving a Value Chain

Often, one comes across a situation, in which the inefficiencies that have crept into some critical nodes of a value chain are so great as to render the entire chain ineffective or sick. In such a case, both the end users (customers) and the primary producers are the worst sufferers. An analysis of the entire value chain, focusing on the ruling constraints at each level or node, is critical in producing a plan of action to breathe new life into the chain.

In the late '90s, BASIX became aware of the sickness that had crept into the cooperative milk value chain under the umbrella of the Andhra Pradesh Dairy Development Cooperative Federation (APDDCF). Of the six milk-chilling plants (MCPs), established by the Federation in the '80s, in Mahbubnagar District, three had become defunct by 1997. The MCP at Wanaparthy, with a capacity of 10,000 litres per day (lpd) and a break-even of 6,000 lpd, had an average milk procurement of just 1,290 lpd, leading to heavy losses. APDDCF was contemplating closing down the MCP. It was at this point that BASIX decided to step in and revive the value chain, starting with Wanaparthy (case study in Part III).

BASIX's assessment of the value chain showed four key ruling constraints that contributed to the Wanaparthy plant's impending closure:

- *Limited milk collection:* Only two milk routes were in operation, no milk producer co-operative societies had been organized, and village producers did not know if milk collection would continue at existing centres.
- *Lack of production incentives:* The milk collection centres did not conduct fat tests on the milk, resulting in a low procurement price and no incentive for quality.
- *Limited product and domain knowledge:* Limited extension activity resulted

in improper vaccination, outbreak of diseases among livestock, poor feeding practices, and improper care during animal pregnancy. Inputs supplied were reaching only the influential farmers.

- *Limited availability of credit to village producers:* Most credit provided under government sponsored schemes reached only a few producers in each village, was not timely, took too long to obtain, had high transaction costs, and was misused by borrowers. Bank credit was negligible, with the exception of government-sponsored borrowers.

Since these inefficiencies lay at the primary production level rather than at the chilling plant level, the intervention was designed to address the four constraints at that level. BASIX entered into an agreement with the Wanaparthy MCP to provide credit to the producers. Besides credit, BASIX helped the unit to address the ruling constraints in various ways, including improving collection efficiency, introducing electronic milk testing machines for quick testing of fat, automation of accounting and payments, insurance of animals through a tie-up with New India Assurance, etc.

At the marketing level, it was realized that for a bulky produce like milk, it made little sense to transport it to a distant chilling plant, and transport it back to the local market after processing. To remove this inefficiency of logistics, it was decided to sell milk locally as long as such a market was available. Local sale of chilled, 'loose' (non-packaged) pure milk was initiated using 100 litre micro-coolers at retail shops in small towns for the first time in November 2000. Later local milk-pouch packaging machines were also installed.

All these measures had the desired results, and the chilling plant saw a dramatic turn-around. The average milk procurement increased from 1,300 lpd in 1998 to 6,400 lpd in 2000. As a result of the improved efficiency in the value chain, milk wastage was reduced, and the producer saved 20 ml milk/litre. The MPCs saved about 9ml/litre. The strategy to sell milk locally as long as there was a local demand for the product led to a four-fold reduction of transport costs, and the milk handled per employee went up by more than four times.

The impact on livelihoods was even more significant:

- Sale of milk from villages in the area increased from below Rs 50 lakhs to over Rs 2.4 crores per year.
- Net profit of milk producers increased by Rs 40 lakhs per annum or Rs 5,700 per household (significant, considering that the annual family income of BPL family of five is below Rs 25,000).
- The number of milk producers increased to 13,242.

By July 2001, BASIX was working with over a dozen APDDCF chilling plants in Anantpur, Cuddapah, Kurnool, Mahabubnagar, Nizamabad, Medak, Adilabad, and Srikakulam Districts.

Another interesting case is about the revival of value chain for traditional 'Kolhapuri chappals'. The leather artisans of Athani and Nippani in Northwest Karnataka were well known for their traditional skill of making these sandals. However, prior to 2000, most of these families were reduced to low-wage bonded labour in footwear factories owned by dominant traders. As the quality could not be maintained, the reputation of Kolhapuri chappals also took a beating and, increasingly, out of desperation artisans had to give up their traditional source of livelihood. Bangalore-based Asian Centre for Entrepreneurial Initiatives (ASCENT) designed a programme to revive the value chain with remarkable effect (Box 5.1)

Some lessons from the above experiences are:

- A value chain that has gone sick can be revived so long as there is a market for the product.
- The case of milk value chain shows that for a bulky product with high transportation cost and low shelf-life (representing LMHV product), as long as the local market can meet livelihood demands and give better returns, there is really no need to strive for distant markets. However, in the case of a HMLV product, which has a niche market, the reverse may be true because the maximum gains could be had from customers willing to pay higher prices.
- While introducing new technology, 'build, operate and transfer' seems to be a practical heuristic or thumb-rule to follow.
- The primary producers need to be organized and their capacities built before they can take up commercial functions.
- If the people's institution has to deal with markets, particularly with foreign markets, it must have a legal personality. Some forms of institutions are more suitable for commercial function such as private company, producers' company, section 25 company, etc., whereas other forms such as trust, society, etc., are more suitable for welfare functions. The choice of institutions is discussed in more detail in Volume IV of this handbook.

Box 5.1: The Return of Kolhapuri Chappals!

Kolhapuri footwear is handcrafted from natural leather that is eco-friendly. It is locally bag tanned with vegetable dyes. Athani and Nippani in Northwest Karnataka is the heartland of Kolhapuri sandals and home to over 400 families of artisans with a rich legacy of this traditional skill. Prior to 2000, most of these families found themselves in a vicious cycle of low price leading to use of lower quality leather, degradation of skills, resulting in poor quality of products. The reputation of Kolhapuris became one of poor quality cheap chappals. A prior intervention had failed because it did not focus on entrepreneurship and was gender blind, even through it was known that in the role division of Kolhapuri chappals, men fashioned the hardy soles while women crafted the intricate uppers.

ToeHold Artisans Collaborative

Asian Centre for Entrepreneurial Initiatives (ASCENT), a social enterprise committed to fostering an entrepreneurial culture and wealth creation in society, decided to help these artisans. ASCENT initiated Project EnterPrice (Jan 1999 - Dec 2002) funded by NLDP, UNDP with technology support by Central Leather Research Institute (CLRI), Chennai, and infrastructure support by the Government of Karnataka. The project aimed at securing the right price for the products for the artisans, and transforming women artisans into entrepreneurs. The focus was on economic development through distance marketing including exports. The core principal was “build, operate and transfer”.

The project led to the formation of a people’s institution, ToeHold Artisans Collaborative (TAC) in 2002. Two hundred women artisans, the main stakeholders of TAC, first organized themselves into 11 SHGs. Subsequently the men too joined the movement, and set up their own SHGs. A Common Facility Centre to provide selective mechanization and technical support, and a Raw Material Bank to provide access to quality raw material was set up all within the easy reach of women artisans. Although initially TAC, was registered as a trust, it was converted to a Section 25 company to take care of all business operations including collective marketing of the produce and development of artisans as a leather cluster around Athani. While women own the business entity, men participate in all business operations along with women, and have access to benefits like training and capacity building.

TAC began exporting its product as ethnic footwear to clients in Italy, Japan, and Australia. It successfully targeted the 'high margin low volume' market in those countries. Revenues almost quadrupled between 2001 and 2003. In 2007, TAC's export turnover was expected to cross US $100,000. A B2B web-driven model has been established. TAC's web-based catalogue showcases over 450 designs, a testimony to the design and quality capabilities of the artisans. International Trade Fairs have also been tapped to take Kolhapuri footwear to international fashion markets.

In 2006,TAC received Excellence in Exports Award as the Exporter from More Backward Area from Federation of Karnataka Chamber of Commerce and Industry (FKCCI). In recognition of its contribution in digital bridging, TAC's website www.toeholdindia.com won the National Manthan Award for e-content in business category in 2005.

Impacts

Before 1999, the artisans earned a net income of about Rs.12-15 /pair. Today their earning has gone up to about Rs.40–50 per pair. Their efficiency has doubled: each artisan family now makes about six pairs of sandals a day in place of three. The annual wages per family have gone up from, Rs. 6075 to about Rs. 54,000, not counting an annual dividend of 40%. The enterprise has kindled self-worth amongst artisans who now seem to have taken control over their destinies.

Source: Chatrapathy Madhura (2007)

Guidelines for Reviving a Value Chain

- √ Study the value chain in the chosen sub-sector.
- √ Identify the ruling constraints at each node of the value chain, but more specifically at the primary producer level.
- √ Address the ruling constraints through direct intervention or suitable linkages.
- √ Anticipate future constraints to growth by studying changes in the business/ market environment.
- √ Prepare a strategic plan to address the future/emerging constraints.

Reconstructing a value chain

Sometimes a value chain may have to be drastically modified or reconstructed in order to meet the challenges of a changing market, or to accommodate changes in

technology, or to introduce new actors in the chain. Such changes could include:

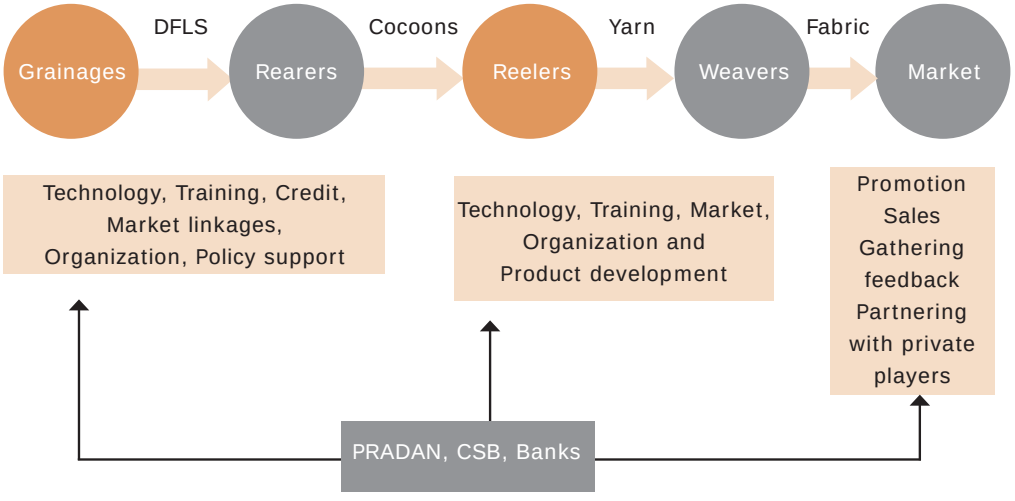
- Addition of a node or nodes in the value chain.
- Elimination of a node or nodes in the value chain.
- Merging or integration of more than one function in a given node.
- Re-allocation of functions between different actors.
- Changes in the pathways or the flow of the product as it undergoes transformation.
- Changes in the margins retained at different nodes as a result of the above changes.
- Changes in overall value produced by the chain.

In the tasar silk intervention that we used as an illustration earlier in chapter 4, it was the introduction of new technology by PRADAN that led to a reconstruction of the value chain. Before the intervention took place, there were only three steps, namely, cocoon rearing, weaving (including reeling by the weaver's wives), and marketing of the fabric. The intervention saw the introduction of two new steps/nodes (Figure 5.2).

a) **Grainages:** The step of producing DFLs by grainage entrepreneurs prior to the cocoon rearing step was introduced after CSB and PRADAN collaborated to demystify the science of producing DFLs, and successfully train local youth to produce the same at the village level. More recently these entrepreneurs have learnt to produce basic seed material at the cooperative level. Training is also underway to integrate further backward by producing nucleus seed material.

b) **Reelers:** Introduction of reeling machines and creation of common facilities for reeling by poor rural women replaced the traditional and crude method of reeling practised by the wives of weavers. The traditional method involved making yarn with bare hands on the thighs, which was drudgery for the women, and yielded poor quality of yarn. Hence, the weavers were divested of this function and a new exclusive node for reeling emerged.

Figure 5.2: Reconstructed value chain in tasarsilk sub-sector



Source: PowerPoint presentation by Satyabrata Acharya, PRADAN

Some lessons from the experience

- While creating new nodes, care was taken not to displace the existing poor from their livelihoods. For instance, the weavers were not replaced. Rather, PRADAN worked with them to improve their efficiency so that they too could become an integral part of the value chain.
- Demystification of technology is often a first step for introducing new technology. In this case, the tribal youth were trained to take up the role of grainage entrepreneur.
- The introduction of new nodes meant a lot of readjustment — changes in flow of material, creation of new people's institutions, etc., and resultant changes in margins at different nodes.

Guidelines for Reconstructing a Value Chain

- √ Study the value chain in the chosen sub-sector.
- √ Identify the ruling constraints at each node of the chain.
- √ Explore new technological alternatives to increase productivity.
- √ See which groups of producers could benefit from the new technology.
- √ Introduce new nodes where necessary to accommodate the new technology.
- √ Create new institutions that can integrate certain functions.
- √ Study the impact of these changes on the value chain.

Leveraging a value chain

Some social entrepreneurs have adopted the strategy of gaining control over the value chain by outsourcing processing at various stages but retaining the marketing of the outputs. To maintain economic viability of the enterprise, the social entrepreneur adopting this strategy would charge a small service fee at each stage of outsourcing. For want of a better terminology, we refer to this as "leveraging" the value chain. This strategy becomes relevant when the intervention has already worked with primary producers and built a strong base and there is a need to gain a greater control over the value chain right up to the end consumer. However, due to existence of entry barriers such as high technology, high capital, large volumes etc. it is not possible to operate in all the nodes of the value chain.

AGROCEL[1], a social enterprise seeking to create a pro-poor organic cotton value chain for farmers in Kutch has adopted this strategy by outsourcing the task of cotton processing through its various stages to different processing units, usually identified by its customers. The first consignment of T-shirts produced in this manner was sold through the Fair trade channel to OXFAM, Belgium, which turned out to be a success. Since then the strategy has been fine-tuned to include the stages of ginning, spinning, weaving and tailoring. The profit margin of ginning units is very low (2 – 2.5 %) whereas the margin of spinning units is higher as compared to others in the supply chain. However, it requires very high investment in start-up capital. While outsourcing spinning activity, AGROCEL works on optimum batch size, which helps in keeping the final product price competitive. As on 2008, AGROCEL's product-mix consisted of cotton at various stages of processing, i.e. fiber (40%), yarn (40%), fabric (5%), ready-made garments (15%). At each level of value addition AGROCEL charges 1 - 3 % as service charge, which contributes to its profitability and financial sustainability (see case study in Part 2).

The organic cotton garments produced through this pro-poor value chain is sold through fair-trade channels by high-end retail chain stores like Marks & Spencer in the U.K. Both, Marks and Spencer as well as other promoters of the fair-trade movement (such as Shell Foundation, Vericott Exchange. etc.) have made considerable investments in developing this value chain and building the capacity of AGROCEL to interact and negotiate with large international customers. AGROCEL on its part was able to leverage the brand value of its partner institutions to influence the entire value chain and get outsourcing work done as per its specifications.

Some lessons from the experience:

- The leveraging strategy has enable AGROCEL to gain control over a substantial part of the value chain without actually making large investments

in processing and manufacturing units.

- In addition to the large investments in textile mills, large volumes were also necessary to break-even, something that AGROCEL could not hope to achieve in the short or medium terms.
- The strategy makes it possible for the social entrepreneur to market produce to the end-users under the organisation's own brand and to reach out to potential customers who support certain causes such as fair-trade, organic/ natural food production, prevention of cruelty to animals, hand-crafted production etc.

Guidelines for skimming a value chain

√ Assess the value chain to see which nodes can be "taken over"' and which cannot, because of certain entry barriers such as technology, capital intensity, scale etc.

√ For nodes that cannot be taken over, adopt the strategy of outsourcing the work according to your customer's specifications

√ Assess the optimum order quantity for outsourcing

√ Leverage high-end bulk consumers to influence the value chain and specify production as per their needs

√ Retain marketing and branding rights over the products.

Creating a New Value Chain

Very often we come across a situation where consumers in one part of the globe are unaware that the kind of products that they need are actually being produced by marginal producers in some other part of the globe. In the present era of globalization and use of ICT, it is increasingly becoming easier for social entrepreneurs to connect such consumers and producers. In the process they end up creating new value chains with entirely new channels of marketing to reach the distant consumers while they themselves work with the producers to build their capacities to produce what the market wants.

A new value chain may also be contemplated when the effort involved in reviving an inefficient value chain is far greater than starting a new one, or when new players bring in new technology and applications which cannot be handled by existing value chains.

A recent phenomenon is the creation of decentralized (local) value chains of producers who create value added products for local consumers. Examples include supply of organic fertilizers like vermicompost, supply of herbal pesticides, and supply of processed/semi-processed food products.

Linking up with distant consumers of specific value orientation

The recent movement for organic farming among producers of food and cotton and the demand as well as support from consumers in industrialized countries for organic produce, have provided a unique opportunity for linking the two and creating a new value chain for organic produce. Similar is the case with the fair-trade movement where the discerning consumer is willing to support small producers in developing countries and to see that they get a fair deal (see Box 5.2 for principles adopted by the movement). Other values that specific groups of consumers in industrialized countries uphold include hand-crafted produce as compared to machine-made, prevention of cruelty to animals, bird-friendly production processes etc.

Rahul Barkataky, a young social entrepreneur based in New Delhi, founded a private company with a social goal, called Community Friendly Movement (CFM) in the non-farm sector. CFM used fair trade channels to link consumers in the USA, willing to purchase 'hand-made artifacts' in developing countries, and thereby get the satisfaction of helping the poor as well. These artisans were located in clusters in different parts of the country. The real challenge was not that of marketing since a demand for the produce existed. The challenge lay in organizing the producers and developing the value chain by introducing new systems of communication, production and quality control, incorporation of new designs with the help of professional designers and providing new systems of incentives to the artisans to ensure their commitment. CFM measures its success by the extent to which artisans are able to get fairer returns for their labour (for details, see case study, Part 2).

Another social entrepreneur, Sumita Ghosh, has similarly created a new value chain that links poor, traditional artisan groups in the handloom and textile industry with ethnic fashion conscious consumers in India and abroad. Sumita has a strategic alliance with FabIndia, a leading marketing company in the domestic market with fair trade values. The alliance comprises a joint holding private company called Rangasutra with equity participation of the promoter, FabIndia, as well as artisan groups. Sumita has also facilitated the formation of a producer company with equity participation of artisans, NGOs and other supporters. The role of this company has been to develop artisan groups and coordinate and pool diverse skills in a way that meets the demands of the market (for details, see case study, Part 2).

Realising the importance of the organic and fair trade movements in developing new markets for their primary producer clients, AGROCEL began to take an active role in promoting these movements within the country. It established International Resources for Fairer Trade, Mumbai, as a resource institution to provide leadership for this movement. It has embarked upon a unique and ambitious project to set up an Organic Park about 100 kms from Ahmedabad in Gujarat, with a total investment of Rs. 80 million. This futuristic centre will meet the dual purpose of serving as a resource centre for potential organic and fair trade farmers, and as a means of creating awareness among potential customers in India (see case study, Part 2).

Box: 5.2: Basic Principles of Fair Trade

Fair trade is an organized social movement with a market-based approach that aims to help producers in developing countries obtain better trading conditions and promote sustainability. The movement advocates payment of a higher price to producers as well as establishing higher social and environmental standards.

The World Fair Trade Organization (WFTO) – outlines 10 key principles that are essential to fair trade.

1. *Creating opportunities for economically disadvantaged producers:*
   Fair trade is a strategy for poverty alleviation and sustainable development. Its purpose is to create opportunities for producers who have been economically disadvantaged or marginalized by the conventional trading system.
2. *Transparency and accountability:*
   Fair trade involves transparent management and commercial relations to deal fairly and respectfully with trading partners.
3. *Capacity building:*
   Fair trade is a means to develop producers' independence. Fair trade relationships provide continuity, during which producers and their marketing organizations can improve their management skills and their access to new markets.
4. *Promoting Fair Trade:*
   Fair trade organizations raise awareness of fair trade and possibility of better justice in world trade. They provide their customers with information about the organization, products, and in what conditions they are made. They use honest advertising and marketing techniques, and aim for the highest standards in product quality and packing.

5. *Payment of a fair price:*
   A fair price in the regional or local context is one that has been agreed upon through dialogue and participation. It covers not only the costs of production but enables production which is socially just and environmentally sound. It provides fair pay to the producers and takes into account the principle of equal pay for equal work by women and men. Fair traders ensure prompt payment to their partners and, whenever possible, help producers with access to pre-harvest or pre-production financing.

6. *Gender equity:*
   Fair trade means that women's work is properly valued and rewarded. it ensures that women are always paid for their contribution to the production process, and are empowered in their organizations.

7. *Working conditions:*
   Fair trade means a safe and healthy working environment for producers; that the participation of children (if any) does not adversely affect their well-being, educational requirements and need for play, and conforms to the UN Convention on the Rights of the Child, as well as the laws and norms in the local context.

8. *Child labour:*
   Fair trade organizations respect the UN Convention on the Rights of the Child, as well as local laws and social norms in order to ensure that the participation of children in production processes of fairly traded articles (if any) does not adversely affect their well-being, security, educational requirements and need for play. Organizations working directly with informally organized producers disclose the involvement of children in production.

9. *The environment:*
   Fair trade actively encourages sound environmental practices, and the application of responsible methods of production.

10. *Trade relations:*
    Fair trade organizations trade with concern for the social, economic, and environmental well-being of marginalized small producers, and do not maximize profit at their expense. They maintain long-term relationships based on solidarity, trust, and mutual respect that contribute to the promotion and growth of fair trade. An interest free pre-payment of at least 50% is made if requested.

Source: World Fair Trade Organization (2009)

Sumita has also facilitated the formation of a producer company with equity participation of artisans, NGOs, and other supporters. The role of this company has been to develop artisan groups, and coordinate and pool diverse skills in a way that meets the demands of the market. The producer company can access government grants for the purpose of developing clusters of artisans. It makes itself financially viable through consultancy charges to other NGOs, which have similar developmental funds. The company also has the freedom to develop its own lines, and explore the LVHM (Low volume high margin) markets on its own through retail partnerships. Rangsutra plans to set up a separate organization, and register it as a society, to meet the welfare needs of the artisan groups.

In addition, there are a number of similar cases where social entrepreneurs have successfully linked rural artisan groups to distant consumers in industrialized countries through fair trade channels or to urban consumers. Examples include SEWA (Lucknow), Sasha (Kolkata), Sadhna (Udaipur), Shrujan (Kachchh), Sahaj (Dahod) among others (see in Annexure 2).

Some lessons from the above experiences:

- Tapping social movements among consumers like the organic produce movement, fair trade movement, movement for handcrafted products, etc. is a good way of reaching the distant, concerned consumer.
- It is often more practical to set up separate institutions to carry out commercial, developmental, and welfare functions in a value chain intervention that aims at improving the lot of marginalized primary producers.
- Interestingly in all the above cases, the promoters also had economic stakes in the enterprise. This ensured greater commitment and builds a lasting partnership with the primary producers. The issue of withdrawal strategy which often bothers agencies that promote crafted institutions is a non-issue in this kind of institutional arrangement.

Guidelines for creating a value based value chain

- √ Identify the need of distant consumers which can be fulfilled by local unorganized producers.
- √ Try to tap global movements like demand for organic food and fiber, fair trade movement, etc. to reach distant consumers to garner their support for local producers.
- √ Work as a supply chain manager to upgrade quality of production and design of products to meet the requirements of consumers.
- √ Create separate institutions to meet the commercial, developmental, and welfare functions in a value chain.
- √ Undertake certification to provide assurances to consumers and instill discipline among producers.
- √ Ensure that primary producers get a fair share of the price spread.

Creating decentralized (local) value chains

Rural producers themselves represent a large market of consumers is a fact that has not been lost on many an entrepreneur. A few developmental agencies have tried to promote decentralized (local) value chains that link the local producer and local consumer through a process of aggregation, value addition and dis-aggregation. Examples include:

a. *Value chains for seed production*: In Madhya Pradesh, producer companies of farmers were established at the district level to produce seed material of crop varieties that farmers prefer. The companies were organized by Action for Social Advancement and the state department under DPIP. This was a follow up to the programme of participatory varietal selection and promotion (PVSP) which proved to be a tremendous success, and generated local demand for certain varieties that were typically not being supplied by either the state institutions or the markets (case study in Vol 1).

b. *Value chains for vermicompost production*: Decentralized value chains for production of vermicompost have sprung up all over the country during the last decade after the technology spread through the SHG movement, aided and supported by developmental agencies. The case study of BAIF promoting vermicompost in Gujarat is provided in Volume 1.

c. *Value chains for processed food commodities*: Self Employed Women's Associations (SEWA) initiated a project called Rudi Bazar with the objective of supplying pure food commodities after primary processing through a value chain that is managed by the farmers themselves. The women are involved not only in procurement and processing activities, but also in marketing the produce to the door step of the farming communities. (Box 5.3).

Box 5.3: Rudi Bazar

Promoted by Self Employed Women's Association (SEWA), Rudi Multi Trading Company Limited (RMTC) was established with the objective of building an integrated value chain providing multiple employment opportunities to rural women in the form of procurement, processing, packaging, marketing, and management. This in turn would enable efficient supply of quality agro-products to rural communities.

Sewa Gram Mahila Haat (SGMH), the agriculture-marketing arm of SEWA that also handles entrepreneurship activities of the members, started the Rudi project at Sabarkantha District on a pilot basis in December, 2004. The produce (mainly agri-based products) of over 4,000 self-help groups comprising over 3.50 lakh women from 14 districts of Gujarat is procured, graded, sorted, cleaned, packed and sold through the network. Initially Hindustan Lever Ltd. (HLL) and Grassroots Trading Network assisted SGMH in providing the necessary technical expertise and capability to set up the network. Later other groups from the corporate world started lending their support.

Rudi Bazar, as the initiative is referred to, follows a simple model. Products of rural producers are procured and processed by District Associations (DAs). These are the associations of producer groups, which in fact are SHGs of small and marginal farmers. The products are sold by rural sales women, popularly known as Rudi Ben. During the initial period all activities were carried out under the guidance of SGMH. Later, it was decided to promote a public limited company (RMTC), which is primarily owned by the farmers. At the beginning of every season DAs and RMTC enter into a sale purchase contract. In this way the company bears all the market risks allowing the DAs to concentrate on improving the efficiency of procurement and processing.

The company's mission is to establish Rudi as a national brand over a period of 10 years. *Rudi* in Gujarati means pure and beautiful. Rudi is a value for money brand that symbolizes pure products produced and processed by the rural women members from across Gujarat. The value chain is designed to reach good quality, pure farm and non-farm products to the rural and urban consumers at affordable prices.

The entire operation of Rudi in one district ensures a stable direct employment to 500 women per month. The sales turnover for the company for the first three years has been Rs.14.5 lakhs, Rs.31 lakhs, and Rs.59 lakhs respectively. The target for the year 2008-09 was to achieve a sales turnover of Rs.1.5 crores.

Source: Sewamart (2010) Business Standard (10 Dec., 2004)

From the above examples one can draw some conclusions about building successful decentralized value chains:

Guidelines for building Decentralized value chains

- √ The choice of the product should be one that is greatly valued by the local consumer, and fits well into the local production system.
- √ Usually bulky produce is more suitable for such value chains because it is expensive to transport them over long distances.
- √ The success of the value chain depends on the ability to organize procurement (aggregation) of produce, suitable value addition (primary processing), and distribution channels and outlets for rural consumers (disaggregation).
- √ Decentralized value chains can start small (for example limited to the same village), and scale up to cover entire local communities or specific geographical areas through a process of networking.
- √ Once the local consumers' need is taken care of, the enterprise can explore urban markets in order to improve profitability.
- √ Local producers know exactly what should be the marketing strategy to reach local consumers since they themselves are both producers and consumers. This knowledge should be taken full advantage of while designing marketing strategies.

Creating ICT based value chains in the service sector

ICT is opening up new vistas for rural livelihood augmentation in the service sector through creation of knowledge/ information value chains. While many such chains are created by the public and private sectors to reach knowledge/information products to rural clients, the reverse flow of knowledge/ information services is only just beginning and possesses a greater potential for livelihood augmentation.

The emergence of rural business process outsourcing (BPO) companies has shown how this potential can be tapped. As of June 2009 there were about a dozen rural BPO players in India. In terms of size they vary from 20 people BPO of Source for Change to 160 people BPO of RuralShores in Bagepali village, close to Bangalore.

Sai Seva BPO has been set up in a tiny hamlet called Puttaparthi, 140 kms from Bangalore city in Andhra Pradesh. The BPO employs 50 young citizens, who stay within a 10-15 kms radius of the center. There are no night shifts, which makes it convenient for women to participate. Around 80 percent them are graduates, the remaining having passed class XII. Sai BPO provides free computer training for potential employees and also sponsors them for higher education. Unlike other BPOs, there are no night shifts at Sai Seva BPO and attrition too is non-existent. The BPO provides a host of services to domestic and overseas customers. These include form/image-based data entry, data/format conversion from PDF, back-office transaction processing, application processing, E-mail marketing, data mining, data imaging etc. The customer list includes HDFC, MATRIX, Royal Sundaram and Rea Source, a US-based mortgage firm among others (Nasscom Foundation, 2010).

BPO value chains in India are undergoing substantial re-structuring as Indian IT majors like Infosys ($ 316 m) and Wipro ($ 395 m) finalise their plans for entering rural areas and small towns to maintain their competitive edge and cater to the growing domestic market. The move to rural areas for these companies would help cut costs by 60% while retaining gross margins from domestic business at rates similar to those from international business (about 22-24%) (Shelley Singh, June 2009). Rural BPOs also have the unique advantage of providing services to local markets in the local language.

End-notes

1. AGROCEL Industries Pvt. Ltd. is a company promoted by the Shroff Group of companies. Its Agri-services division is responsible for the creation of the organic cotton value chain.

6 Social Capital for Market-led Interventions

Introduction

In Volume I, we discussed the need for building social capital both as a means and as an end of development. The importance of social and human capital for NRM-based livelihood strategies was discussed in some detail. To recapitulate, social capital represents social resources upon which people draw, in pursuit of their livelihood objectives. These social resources can take several forms:

- Networks and connectedness in informal groups. This increases the ability to work together.
- Membership of more formalized groups. This calls for adherence to mutually agreed upon or commonly accepted rules, norms, and sanctions.
- Relationship of trust, reciprocity, and exchange. This facilitates cooperation, reduces transaction costs, and could provide safety nets for the poor.

As discussed, the importance of social capital lies not only in bringing the poor and marginalized together for collective action of various types, but also in its power to transform the very social structures and processes in which it is embedded.

In the case of NRM interventions we saw that PIs both traditional and modern play an equally important role and in some cases developmental agencies even tried to revive traditional institutions that had disintegrated. In the case of market-led interventions it is largely the modern, democratic institutions that are expected to play a major role since traditional institutions rarely had to deal with market forces. In the present globalised economy with a policy of liberalization even farmers have to survive in an increasingly competitive environment. The need for collective action to deal with markets and protect the marginal producer from market risks has never been felt so strongly before.

Institutions that deal with markets need a completely different orientation from that needed in production oriented or food-security oriented organizations. Primary producers that produce for the markets for the first time, (and for that matter developmental agencies supporting them), need to undergo a change in the mindset. They must realize that markets are competitive; they do not permit sloth, indulgence or waste. Hence, the facilitating agency and producing communities will have to become

efficient and cost effective in every sphere of their enterprise. The gap between what the market demands and what the producers can deliver must be understood well and bridged through a variety of well planned measures such as:

- Expert guidance in product/ service design
- Technical inputs and adoption of suitable technology
- Capacity building and skill up-gradation
- Supply of quality inputs at the doorstep of the producer at a reasonable price
- Access to credit at non-exploitative terms etc.

Aggregation of primary producers and/or their groups is an important feature of PIs for market-led interventions. The marginal producer's ability to negotiate in the market place goes up significantly when produce is aggregated as it brings down the transaction costs for dealers and other large players in the market. The bargaining power goes up further when value is added to the produce through cleaning, grading, processing, packaging and branding. PIs that take up collective enterprise can progressively move up (forward) the value chain through value addition processes or move down (backward) in order to procure better quality raw materials and inputs for its producers at a cheaper price. When a producer's collective enterprise straddles the entire value chain right up to the end consumer it begins to control the value chain and gain a greater share of the terminal price. This often calls for substantial investment in social capital and creation of specialized PIs at different nodes of the value chain.

This chapter provides an overview of the institutional arrangements and approaches possible in market-led interventions without getting into details of design, which are discussed in Volume IV of the handbook. We begin by describing a typical collective enterprise institution and how, while continuing to have the main characteristics of self-organising institutions it differs from them in certain other ways. The model shows how a collective enterprise tries to incorporate the commercial function without loosing out on the developmental and welfare functions of the collective. This is followed by a discussion on making informed choices for selecting a legal personality of the institution. The choice of legal personality has long-term administrative and legal implications for the functioning of the PI. We then look at alternative approaches to social capital building for market-led interventions. We conclude with some observations on making institutional arrangements for value chain interventions.

Conceptual Model of Collective Enterprise Institution

A collective enterprise institution can be conceptualized as having three main components a) the *general body* consisting of members who are both producers as well as users of various services provided by the institution b) *governance structure*

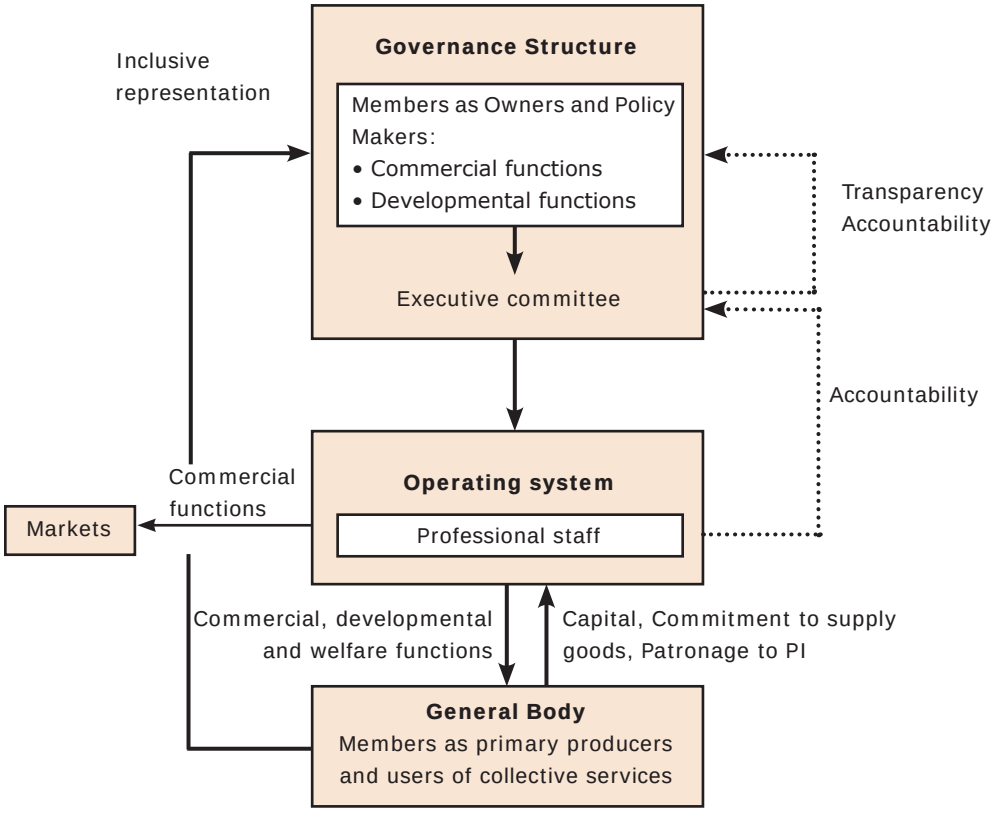
and c) *operating system* (Shah Tushaar, 1996). In a professionally managed collective enterprise, professional staff may be hired for marketing and other commercial functions including product development and design, quality control, and suitable services to primary producers who are also the members of the institution. Professional staff with special skills, intermediates between the governance structure and the operating system. Face to face mutual monitoring that was possible in small affinity groups is no longer possible and a representative, democratic governance structure is brought in place.

The governance structure (which includes the general body and the executive committee) takes on the responsibility of making policy decisions with regard to three main functions viz. commercial, developmental and welfare functions that the collective institution has to perform.

- *Commercial functions:* The commercial functions typically include dealing with markets and market institutions including potential clients, suppliers, financial institutions and technical resource institutions. It also includes product development, business development services, input supply to member producers and quality control.
- *Development functions:* These include building the technical and managerial capacities of the producers and their institutions/ informal groups, helping to install quality systems and market orientation among producers etc. It also includes the functions of research, networking and policy advocacy.
- *Welfare functions:* This includes the well-being activities of members including health, education, insurance etc.

The executive committee is empowered to take care of the day-to day management through its members or professional staff (if any). One of its functions is also to review the performance of professional staff as well as compliance of members to the rules/ policies of the institution and to take suitable action against infraction of rules. Figure 6.1 provides a schematic diagram of a typical collective enterprise institution. As the figure shows, the system is designed to maintain mutual accountability between the three components. The executive council holds the operating system accountable, the general body holds the executive accountable and the ordinary member is held accountable by the executive council and the operating system together.

Figure 6.1: Schematic diagram of a typical collective enterprise institution



Institutions of collective enterprise such as the primary producer's cooperative often try to integrate these three functions making it very difficult to manage. The lessons drawn from the case studies in this volume indicate that separating these functions in different types of institutions suitable for each type of function can make the entire task easier to manage. For instance producers' company or a private limited company can best handle commercial functions, as these institutional forms are well suited to perform these functions. On the other hand welfare functions can be played well by a society or trust run either by an NGO or by the people themselves. Developmental functions are usually played by the external agency, until such time that social capital of the people evolves to a high order. The design of institutions for collective enterprise varies depending on how these three functions are organized. An analysis of available cases shows three different models/ approaches in use as discussed in a subsequent section.

Role of Professional Staff in People's Institutions

PIs that manage collective enterprise frequently need to employ professional staff to look

after the commercial functions. It becomes a challenge for the elected representatives of the people's institution to deal effectively with the professional staff and to ensure that they play their role as per the expectations of the members. This is so because professional staff wields power, on account of the education and professional skills that it possess. They are also paid a professional fee, which is determined by market forces and in most cases is much higher than what individual members of the collective can hope to earn.

The institutional design should have built-in mechanisms to ensure transparency of operations and balance of power between the professional staff and the executive committee of the people. The leadership would have to learn to give the professionals enough freedom to take professional decisions while at the same time ensuring that they do not usurp decisions that should rightly be taken by the members themselves. The leadership would also have to learn how to evaluate the performance of professional staff and to take appropriate HR decisions based on their performance. Mutual respect and a common understanding of institutional goals and vision would go a long way in building healthy working relationships between professional staff and elected representatives of the institution.

To sum up, there should be an alignment of interests among the ordinary members, governance structure and operating system. This alignment should be strengthened through common understanding of the vision and mission of the institution, and proper education of the rights and responsibilities of each group which should be reflected in appropriate behaviour towards each other. Only when these conditions are met will the system as a whole function smoothly to achieve the objectives of the enterprise.

Legal and Administrative Implications of Institutional Choice

Institutions for collective enterprise must have a legal personality and therefore must be registered under a suitable Act or Law. Choices for institutional form are determined not only by the nature of membership and its goals but also by the differences in the legal and administrative contexts of each institutional form. Sometimes there are inter-state differences in the legislation for the same form of institution. These differences have implications for the cost of setting up institutions as well as the autonomy and control that can be exercised by the producers. There are implications also for raising capital and accessing funds. To make informed choices, it is better for the social entrepreneur to familiarize himself/ herself with these implications. SaDhan Microfinance Resource Center (2006) has compiled such information for micro-finance institutions. Many of these are also applicable in the context of market-led interventions.

In Table 6.1, we provide an assessment of six alternative institutional forms for market-led interventions. The assessment is based on more than two decades of experience of professionals from PRADAN (Anish Kumar, per. comm[1].) as well as findings of SaDhan. The criteria for assessment include, practical considerations such as cost of registration, extent of initial capital investment needed, extent of producer control, possibility of disposal of surplus to members, tax benefits, scope of equity-participation by members, scope of government support, scope of share-holding by external stake-holders, and ability to access finance. While some of these are self-explanatory, the others are discussed below:

Tax benefits

Societies, trusts and section 25 companies enjoy tax exemption (largely) due to the overtly charitable nature of operations. Cooperatives and Private companies have to pay taxes according to their respective acts, where the tax benefits are the least in the case of private companies.

Government support

Societies, section 25 companies and public trusts carrying out work in the interest of the general public and environment can attract government support with relative ease. A private trust would find it difficult to get support because of the nature of its character and agenda[2]. Cooperatives and producer companies stand a better chance than private companies to get government support. However, in some states that are actively pursuing a policy of promoting industrialization through private sector investments, the opposite can hold true. Government support can take the shape of tax exemptions of various kinds, provision of land on long lease, soft loans etc. Such support is visualized for industrialization in backward zones and in special economic zones.

Registration procedures and costs

The registration procedures are the simplest in the case of societies and trusts. In case of cooperatives the documentation is more elaborate. Getting the clearance from the registrar of cooperative may involve bureaucratic delays. The transaction costs may vary from state to state and in case of rent seeking behaviour of the registrar it could be quite high. The documentation is more elaborate in the case of Company Act, but for Section 25 the registration process is simpler. In the case of Producer Company, local communities may face difficulties in registering a company on their own as the documentation is entirely in English language. This however, may change in the near future. The registration fees are nominal for Society and Trust but moderately high in

case of the Company Act. In addition, companies and cooperatives need to raise the initial share capital specified by the laws stipulated in the respective Acts.

Producer control

In the case of society and trust, the control remains in the hands of the promoters. Hence whether the producers retain control depends on who the promoters are. If they are the producers themselves or if the promoters decided to give a free hand to the producers then they may enjoy control over the organization. The cooperative and producer company on the other hand are designed to provide control to the members who are also the producers. However, even here, initially external support agencies may play an important role and producers would take control as their capacities are built through training and experience. Theoretically this could be made to happen in a private company as well, but in this case control lies in the hands of the shareholders in proportion to the shares held by them.

Governance Structure

The general body of the organization appoints a governing council /executive committee/ board of directors/ board of trustees as the case may be, to manage the day-to-day affairs of the institution. The council/ general body also appoints/elects its own office bearers. In most cases the size of the council varies from 5 to 15 while the tenure lasts from 3 to 5 years. On completion of its tenure, a fixed proportion (usually between 1/4th to 1/3rd) of the members resign from the committee, allowing fresh blood to enter the governing council.

The governance structure of public trusts differs some what in the manner of formation. In this case, the “settler” who provides the initial capital to set up the trust may nominate certain proportion of trustees. He/she may also specify permanent members and even a permanent chairperson. The board of trustees then forms a general council to implement and promote the activities of the trust. Similarly, in the case of Section 25 Company, there is a provision for appointing non-retiring directors to the Board, who do not retire by rotation. A producer company has scope for appointing a specified number of experts as directors. These directors may not vote for the chairperson, but may themselves be eligible, to be elected as chairperson.

The responsibilities and liabilities of the governing council are clearly stated in the Articles / rules submitted at the time of registration. In all cases the governing council may appoint sub-committees to take care of specific responsibilities and ensure the smooth functioning of the institution.

Table 6.1: Legal and Administrative Implications of Institutional Choice

Criteria	Legal Form					
	Society	Public Trust	Cooperative	Producer Company	Sec 25 Company	Private Company
Basic Orientation	Charity/ welfare	Mutual benefit	Patronage/ welfare	Patronage/ commercial	Charity/ welfare	Commercial
Accountability towards	Promoters/ social entrepreneurs	Members	Members	Members	Promoters/ social entrepreneurs	Share-holders
Registration under which act/ law?	Societies Registration Act, 1860	Indian Trusts Act, 1882	Cooperatives Act, under different states	Section 581 Companies Act, 1956	Section 25, Companies Act, 1956	Companies Act, 1956
Registration procedures	Simple	Simple	Moderate but can vary from state to state	Moderate but varies from state to state	Simple	Moderate
Registration Authority	Registrar of Societies	Charity Commissioner	Registrar of Cooperatives	Registrar of Companies	Registrar of Companies	Registrar of Companies
Registration costs	Very low	Very low	Mod. to high*	Moderate	Moderate	Moderate
Start up capital	No minimum requirement	No minimum requirement	Varies on coop. type; at least Rs. 1 lakh for credit coops.	At least Rs. 1 lakh	Not required	At least Rs. 1 lakh
Minimum No. of Promoters	At least seven members for registration	At least two trustees for registration	At least 10 members in most coops.**	At least five directors for registration	At least two directors for registration	At least two directors
Governance Structure	Governance council	Board of Trustees	Executive Committee	Board of Directors	Board of Directors	Board of Directors
Producer control	Difficult	Difficult	Built over time	Built over time	Difficult	Open
Surplus disposal to members	Not possible	Possible	Expected	Expected	Not Possible	Possible
Tax Benefits	++++	+++	++	++	++++	+
Equity partp. by members	Not possible	Possible	Expected	Expected	Possible	Expected
Equity partp. - External	Not possible	Possible	Not Possible	Not possible	Difficult	Easy
Government support£	Easy	Difficult	Possible	Possible	Possible	Difficult
Commercial loans	Difficult	Difficult	Possible	Possible	Possible	Easy
Dissolution	On approval by 3/5th majority of members; assets transferred to another society with similar goals	Irrevocable - charity commissioner may revive/ reorient the trust	Liquidation possible as per procedure of cooperative law	Possible as per procedure of company law	Dissolution possible - funds transferred to another company with similar goals	Possible as per procedure of company law

* *In case of rent seeking behaviour of the registrar of cooperatives there may be delays and high transaction costs making it even more costly than other high cost options.*

** *At least 100 for credit coops.*

£ *Government support varies from state to state. The picture indicated in this table pertains to that of Jharkhand as perceived by PRADAN.*

Alternative Approaches to Social Capital Building

The case studies presented on market-led interventions in Volume II suggest three different approaches/ models to social capital building:

a. Incubation model

b. Social-entrepreneur model

c. Joint stakes model

Incubation model

In this model being practiced by agencies such as PRADAN, the commercial functions are initially performed by a sub-center of the external agency, where local leaders are provided hands-on training. In due course this sub-center with professionally trained people is hived off and a people's institution is created to run and manage it. MASUTA producer's company that produces tasar silk yarn (see case study in Part 2) is a good example of this model. A variation of this model involves creation of aggregated PIs, which are provided professional managers by the external agency. Initially the salary of the manager(s) is paid by the external agency. In due course when the PI starts making profits, this cost is also borne by it. When this happens, the institution gains complete autonomy from the external agency.

In both these versions the external agency does not have a direct stake in the commercial activity or the PI. As a result the external agency also does not share the enterprise risk, although morally it is obliged to stand by the PI. One shortcoming of this model is that the staff of an external agency may not work as hard to make an enterprise succeed as if it were its own.

Social entrepreneur model

Unlike the incubation model in this approach the social entrepreneur decides to set up the commercial enterprise on his/her own initiative taking the attendant risks. The enterprise then builds the value chain by organizing primary producers and building their capacities. In due course producer groups are empowered enough to take on most of the development and welfare functions. Examples include Community Friendly Movement, Rangasutra and AGROCEL, private companies set up by social entrepreneurs Rahul Barkataky, Sumita Ghosh and Kantisen Shroff respectively (see in Part 2, best practices).

At this stage the social entrepreneur may decide to invite producers or their groups to participate in the equity of the company and thereby become partners in the enterprise. If and when that happens the enterprise is transformed into a joint stakes model.

Another version of social entrepreneurship model includes a professional joining a collective enterprise as a manager and building the institution from within. The best known example of such a model is the celebrated Amul dairy of cooperatives developed by social entrepreneurs like Vergese Kurien and political leaders like Tribhuvandas Patel. (Box 6.1)

Box 6.1: The Milk-man of India

On 13th May, 1949, Vergese Kurien who had just returned from a government sponsored training abroad, found himself posted at a government research creamery at the sleepy town of Anand, in Kaira district, some 350 kms from Bombay (now Mumbai). Kaira district had emerged as a major milk producing center supplying milk and milk products to Bombay, thanks to the pioneering efforts of Pestonjee Edulji, who marketed his products under the western sounding brand name 'Polson'. By this time, Polson had a virtual monopoly in the dairy business, having got the British government to pass a legislation which made it the sole procurement agent for milk in the region. The power equations in this value chain got skewed over time with the farmers getting a raw deal. By the early forties, the Congress leaders had started organizing the farmers into cooperatives to improve their bargaining power and minimize exploitation by the company. Under the guidance of Congress leaders like Sardar Patel and Morarji Desai, Tribhuvandas Patel, took up the leadership of the cooperatives. By 1946 the farmers had registered a district level Union of cooperatives and by 1949 they were trying to run a vintage dairy taken from the government on rent. The dairy was located right next door to the research creamery where Kurien worked. Kurien, by now thoroughly bored with his government job, started taking interest in the efforts of the cooperative union. Little did he realize then, that this was to become a life-time association triggering a "white revolution" that would catapult India, into the number one position among milk producing countries.

Source: Kurien (2005)

Together Tribhuvandas and Kurien built the cooperative value chain, competing with Polson and ultimately getting the better of the competition. The Amul pattern of cooperatives became famous for its remarkable success in providing quality dairy products while bringing prosperity to the villagers. On 31st October, 1964, when the then prime minister, Shri Lal Bahadur Shastri,

visited Amul cooperative Union, to inaugurate a new cattle-feed factory, he asked Kurien whether he could work for the entire country to replicate the Amul pattern of cooperatives in other states. Kurien accepted the challenge leading to the formation of the National Dairy Development Board (NDDB) and subsequent launching of Operation Flood in different phases.

The Gujarat Cooperative Milk Marketing Federation is India's largest food products marketing organization. With a total membership of 2.9 million producers in 13 district cooperative milk producers' unions, its sales turnover in 2009-10 stood at Rs 80,053 million. The total milk collection in for the year was 3.32 billion liters (GCMMF, 2010). Operation Flood resulted in doubling the per capita milk availability in the country to 214 gms /day. India has emerged as the largest milk producer in the world with the milk economy valued at an estimated Rs 2,000,000 million. The 12 million small farmers and landless labourers who make up the majority of dairy cooperative membership now have a regular source of income.

Dr. Kurien received international and national recognition for his work as a social entrepreneur. He received numerous awards including Ramon Magsdaysay Award (1963), Wateler Peace Prize (1986), World Food Prize (1989), Padma Shri (1965), Padma Bhushan (1966) and Padma Vibhushan (1999) among others.

Source: Kurien *(2005), GCMMF (2010) and Articlebase (2010)*

Joint stakes model

This model overcomes the difficulty stated in the first approach above. Both the social entrepreneur and the primary producers have a stake in the enterprise. Social entrepreneur Sumita Ghosh of Rangasutra used this model while working with artisan women. Rangsutra Crafts India Pvt Ltd. was incorporated in March 2007 with a total authorized capital of Rs 5 million. The break-up of the paid-up share capital was as follows: Sumita Ghosh (21.36%) rural artisans (24.85%), Artisan Micro Finance Pvt. Ltd, a wholly owned subsidiary of FabIndia (30.45%) and Avishkaar, a social venture fund (23.34%). Significantly the board of directors had four representatives from the artisan's groups and only one each from the remaining share holders. The biggest advantage of this model is that both the producer owners and the professionals are part of the enterprise. Hence they are likely to show, a high degree of commitment to make the enterprise succeed.

A comparison of the main features of the three models is shown in Table 6.2.

Table 6.2: Comparison of the three models of Social Capital Building

Parameter	Incubation model	Social-entrepreneur model	Joint stakes model
Approach	Enterprise incubated in a sub-center run by the support agency and later spawned out as a producer's collective with its own legal identity.	Social entrepreneur starts a commercial enterprise with the social objective of building the value chain of marginal producers so that they get a better deal in the market	Social entrepreneur starts a commercial enterprise with equity participation of marginal producers
Institutional arrangements	Private company or producers' collective incubated by developmental agency or CBO	Private company with affiliated informal producer groups	Private company with equity participation of social entrepreneur and marginal primary producers
Division of Functions			
Initial stages	Developmental agency does much of the commercial function but producers stay together and learn	Social entrepreneur takes up commercial and developmental functions	Joint stakes company takes up the commercial and developmental functions
Mature stage	Producers' collective(s) take up commercial as well as developmental and welfare functions through one or more PI	Social entrepreneur continues with the commercial function. PIs take up developmental and welfare function or separate NGOs of PI take up welfare function	Joint stakes company continues with the commercial function. PIs take up developmental and welfare function or separate NGOs of PI take up welfare function

Institutional Arrangements in Value Chain Interventions

A value chain is referred to as a vertical alliance or strategic network of enterprises within a sub-sector, collaborating to achieve a more rewarding position in the market. Value chain interventions by definition involve building *strategic alliances* between like-minded institutions or institutions which identify with a common purpose of bringing value to the consumer while maintaining their own profitability. The institutional strategy of a VCI would follow from the strategy for building a value chain. At each node of the intervention an external agency or for that matter a well established PI, would need to assess whether it would be advantageous to intervene or to outsource. Once the

decision is taken to intervene, a suitable PI would need to be created if it does not already exist. At other nodes where outsourcing is necessary, strategic alliances may be forged.

Table 6.3 shows the institutional arrangements in the tasar silk value chain promoted by PRADAN. Masuta Producers' company plays a pivotal role in linking primary producers (cocoon producers) to yarn makers and thereafter disposing the yarn in the local market. It has promoted another private company with 90% share holding in collaboration with a marketing professional to convert the yarn into hand made value-added silk products like sarees, stoles etc. However, the marketing company (Eco-tasar Pvt. Ltd) has to outsource the weaving and dyeing operations before it can take the finished product to distant markets in urban centers and foreign countries. In this value chain, all nodes except the first one involve rural producers or their institutions. The first node consists of nucleus seed production for which the PIs and PRADAN have developed a strategic alliance with the Central Silk Board.

Unlike MASUTA, AGROCEL faces greater entry barriers in the organic cotton value chain that it has created in association with fair-trade NGOs in Europe (see best practices, Volume II). It therefore needs to outsource a number of steps in the value chain such as spinning, weaving, dyeing. However, it retains its marketing rights and produces organic garments for the export market under its own banner. In this value chain, it was the good influence of large customers of organic and fair-trade products in the west (in particular Marks and Spencer, a multi-national retailer chain) that helped to create the strategic alliances necessary to complete the chain.

The three models/ approaches discussed in the previous section are applicable to value chain interventions as well, especially in promoting the key institution(s) for collective enterprise. A mature PI can spawn other specialized PIs as seen in the case of tasar silk VCI.

End-notes

1. Based on presentation prepared by Anish Kumar (Programme Director, PRADAN) for a training programme organized by PRADAN in Jan 2009.

2. The distinction between a private and public Trust is that whereas in the former the beneficiaries are specific individuals, in the latter they are general public or a class thereof. A Trust is said to be public when it is constituted wholly or mainly for the benefit of the public at large.

Table 6.3: Institutional arrangements in Tasar Silk value chain intervention

No.	Nodal Point in Value Chain	Actors (Institutions/ Individuals)	Functions
1	Nucleus seed production	Central Silk Board	To supply maintain and supply nuclear seed for production of basic seed and subsequent production of DFLs
2	Basic seed production	Grainage entrepreneurs	To produce own supply of quality seed DFLs for production of DFLs
3	Grainages or DFLs production	Grainage entrepreneurs	To provide quality DFLs to cocoon rearers
4	Cocoon production	Individual rearers drawn from SHGs; guided by local service providers and belonging to cluster level Samiti	To produce cocoon and supply to the next level in the value chain
		Tasar Vikas Samiti at cluster level with 300-350 rearers	To aggregate the production of tasar cocoon for selling in the open market as well as to the Producers' company
		MASUTA producer company, at multi-state level	To procure cocoons, sort and store these and supply to reeling units
5	Yarn production	Mututal Benefit Trusts at village/ cluster level with about 30 women reelers	To manage the reeling centers
		MASUTA producer company with membership of over 60 MBTs, at multi-state level – majority being in Jharkhand	To supply quality cocoons in adequate quantity to the reeling units
		Tasar Cocoon Development Company, joint venture of Jharcraft (federation of weavers promoted by state government) and MASUTA	To procure cocoon requirements for the entire year during the season in December, and to stock it and supply to reeling units of both MASUTA and Jharcraft.
6	Fabric production	MASUTA producer company,	To market or facilitate marketing of yarn to weavers after grading and quality control
		Eco-Tasar Silk Pvt. Ltd. a private company at the national level, promoted by MASUTA (majority share capital) along with a marketing professional	To get fabric made as per market requirements by outsourcing to weavers, dyers, finishers and getting inputs from designers
7	Marketing	Eco-Tasar Silk Pvt. Ltd. a private company	To cater to the export and domestic market for yarn and fabric

7 Summary and Conclusions

Market-led (including value chain) interventions are as challenging as they are rewarding. A social entrepreneur with a good understanding of the market in a specific sub-sector can make a success out of such an intervention. The cases discussed have shown a variety of strategies adopted by social entrepreneurs depending on the specific conditions of the value chain, and the demands and location of potential consumers.

Bio-industrial Ecology

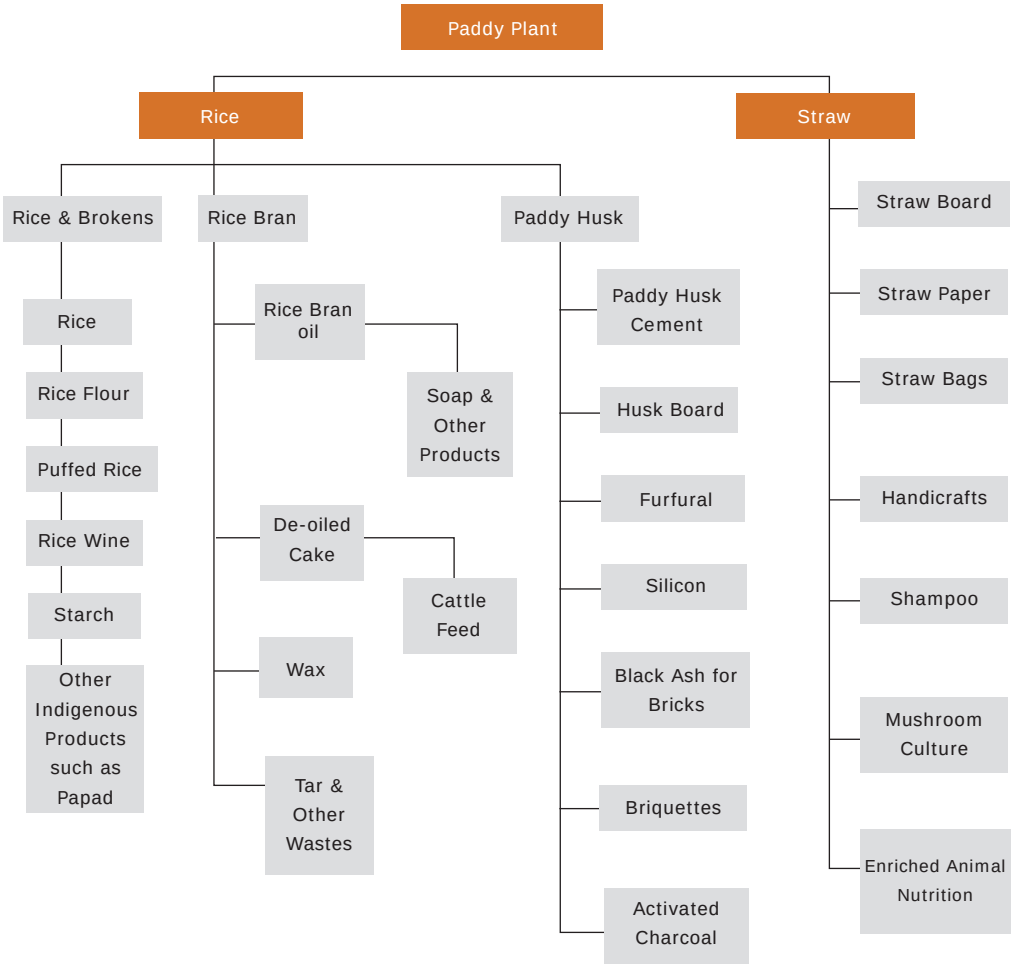
Market-led interventions are inevitable in rainfed areas if these areas are to support a rapidly expanding population without a corresponding increase in the cultivated area, or any significant increase in irrigation facilities. Some agencies like the MSSRF have been advocating the idea of *bio-industrial watersheds*. This stage of watershed development visualizes the establishment of agro-processing/bio-processing units by local communities and groups that would not only own but also control these units. Prof. M.S. Swaminathan has also mooted the idea of special economic zones (SEZs) for farmers; these would help to preserve lands with high comparative advantage in certain crops. Here too, one can visualize the establishment of mutually supportive, inter-dependent, community-based, agro-industrial units, which would add value to the local produce, and enable primary producers to retain significant control over the value chains through market-led/value-chain interventions.

In a bio-industrial complex with an area approach such as the ones described above, each agro-industrial unit would have backward and forward linkages with others, thereby saving costs by optimizing the overall use of resources and energy on the one hand, and minimizing negative externalities of industrialization on the other. This draws on the concept of *industrial ecology*, which is by now considered an important step in the greening of industry in the west.

The pioneering work of Prof. V.K. Gaikwad of the Centre for Management in Agriculture, IIM(A), in the mid ‘80s showed how a single crop can serve as an anchor for an entire bio-industrial ecology (Gaikwad, n.d.). He illustrated this for crops like paddy, sugarcane, cotton, etc., which he called ‘by-product system’ but which, in essence, was a product value tree because it captured the range of value-added products that could be made

from one basic raw material/crop/anchor resource (Figure 7.1). A hypothetical example of a bio-industrial ecology that specializes in poultry is shown in Figure 7.2.

Figure 7.1: Paddy Product and By-product System



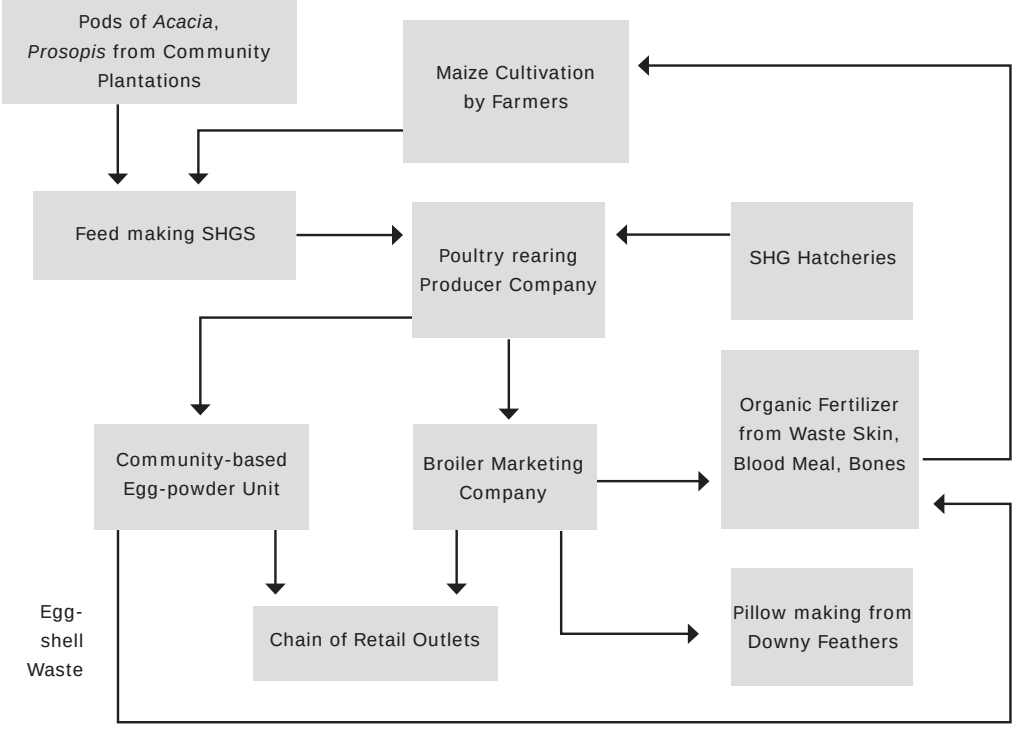
Source: Gaikwad (n.d.)

People's SEZ

An SEZ around specific, natural resource-based industry can be visualized with all the benefits (in taxes, subsidies, etc.) being made available to farmer's institutions with a view to exploit the export market. Such an SEZ, for instance, could be visualized in the *Bhal* area of Gujarat, which is known for producing high quality Durum wheat. This wheat is ideal for production of vermicelli and pasta. At the same time, it is in

short supply because it grows only in dryland in certain pockets of the country. An additional feature that makes it suitable for export markets is that it is cultivated almost without the use of external chemical inputs, being grown on the residual moisture in the soil, and with moisture harvested from the dew in winter. Hence, it can be marketed as a pesticide-free produce if not as an organic produce. Such products command a premium in the western markets and their demand is likely to grow with the growth of the environmental movement all over the world.

Figure 7.2: Poultry as an Example of Mutually Supportive, Inter-dependent, Community-based Industrial Units

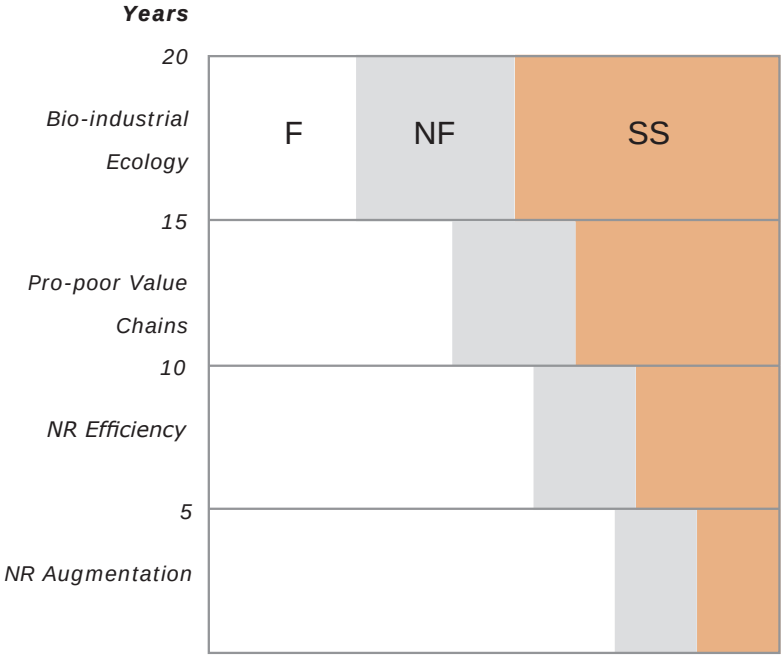


Another potential SEZ could be in coastal saline areas centred around brackish water aquaculture, in which coastal fishing communities could be encouraged to carry out extensive aquaculture in place of intensive aquaculture, with minimum environmental impact. The Marine Products Exports Development Agency (MPEDA) has the available technology to support aquaculture for a host of species, including prawns, rock lobsters, mollusks, clams, oysters, seaweeds, mud crabs, etc.

Developing a Long Term Vision for Rainfed Areas

A long-term vision (over 20 years) for the growth of rainfed areas can be seen progressing through various stages as shown in Figure 7.3. With each stage, the contribution of farm-based livelihoods can be seen to be reducing, giving way to non-farm (including manufacturing), and service sectors. Such a vision is consistent with the three-sector theory proposed by Colin Clarke and Jean Fourastié. According to this theory an economy grows from primary (raw materials) through secondary (manufacturing) and tertiary (administrative and service) sectors, leading to increase in the quality of life, social security, blossoming of education and culture, higher level of qualifications, humanization of work, and avoidance of unemployment. Since then, a quaternary sector comprising the intellectual services: information generation, information sharing, consultation, education, and research and development, and a quinary sector comprising health, education, culture, research, police, fire service, and other government industries not intended to make profit as well as services of home-makers have been proposed as extensions of the three-sector theory. Sometimes, these two sectors are included as sub-groups of the tertiary sector as proposed by Hatt, Paul and Foote, Nelson (1953).

Figure 7.3: Long-term Vision of Livelihood Augmentation



Contribution of farm-based (F), non-farm (NF) and service sector (SS) livelihoods to a watershed's GDP

The coming years will witness more interventions of the type discussed in this volume. One major impediment, however, is the shortage of trained manpower to fulfill the role of the social entrepreneur. Developmental support agencies should develop training packages for selecting suitable sub-sectors, assessing value chains, and making suitable VCIs. It is our fond hope that this volume will go a long way in developing suitable training material for the purpose. Policy makers too need to take cognizance of the potential of rainfed areas, and of the need to promote concepts such as pro-poor value chains, bio-industrial ecology and people's SEZs.

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Part-2

Best Practices

1. **AGROCEL: Linking Small and Marginal Farmers in India to the Organic and Fair Trade Movements**
2. **The Silk Route to Livelihood Augmentation: PRADAN's Tasar Silk Intervention in Jharkhand**
3. **Creating Inclusive Poultry Value Chain: The Kesla Cooperative Model**
4. **Livelihood Promotion Services: BASIX's Intervention in the Milk Sub-sector**
5. **Rangsutra: Adding Colour to the Lives of Indian Artisans**
6. **Community Friendly Movement: Creating Wealth for Artisan Communities of India**

The views expressed in these case studies are those of the authors and do not reflect the official opinion of the institutions studied.

1 AGROCEL: Linking Small and Marginal Farmers in India to the Organic and Fair-trade Movements[1]

Introduction

This case describes how AGROCEL Industries Ltd., a private company (with partial equity participation of the state government), aligned its commercial and social goals to generate wealth for its client groups — farmer households in agriculturally backward regions of India. The case demonstrates that by developing a sustainable business model, it is possible for 'modern', integrated value chains to include the poorest producers (rather than further marginalize and exclude them), and for all parties in the chain to be independently profitable.

The case specifically focuses on AGROCEL's experience of cotton farming (with the small producers of Gujarat and other Indian states), and its marketing through different export channels, including a high-end retail chain store, namely, Marks & Spencer in the U.K. By linking Indian farmers in backward regions with the organic and fair trade movements, AGROCEL shows how even marginal producers can be included in the modern value chain, and made to benefit substantially from it.

AGROCEL Industries has two major divisions, representing two different types of businesses: a) Marine Chemicals Division, and b) Agriculture Service Division (ASD). Though unrelated, the two businesses complement each other, and provide financial stability. In the years of good rain, the agricultural division performs well. The marine chemical division produces bromine and its derivative compounds from the bittern found in one of the world's largest natural saltpans in the *Banni* area of Kutch District. When the monsoons fail, the agriculture division is bailed out by the chemical division because it is not dependent on rain. The bromine factory is run almost entirely by the local people, who have overcome their illiteracy through hands-on training provided by AGROCEL. It represents an altogether different model of inclusive industrial development.[2]

The current case study, however concentrates only on AGROCEL's ASD. The case traces the genesis and evolution of the company, and provides insights into the workings of a private company that has succeeded to uplift small and marginal farmers in backward regions and at the same time remained profitable and has grown over the years.

Genesis

The late Mr. C.C. Shroff, founder of Excel Industries and Mr. Kantisen Shroff, well known Gandhian and Chairman Emeritus, Excel Industries, dreamt of developing the land of their origin — Kutch — and of carrying out developmental activities for the uplift of farmers and rural communities. The long and frequent drought spells in Kutch made Kantisenji, alias 'Kaka', realize that short-term relief measures, though necessary, did not provide any worthwhile long-term solutions to the problems of drought. A business visionary, he thought of developing Kutch through various mutually supportive initiatives. With the help of like-minded people, Kaka formed the Shri Vivekananda Research and Training Institute (VRTI) in 1978. VRTI's main objective was to develop agriculture and horticulture in Kutch, and work closely with the farmers (mainly small and marginal) to solve local problems and eliminate poverty. Kaka's wife, Chandaben Shroff, started Shrujan, an institution devoted to tapping and developing the local embroidery skills of the Kutchi women. It linked them to the elite market in urban India and in foreign countries so that may have an alternative source of employment, especially during drought years. Some of the other institutions that work with SHGs of poor women and established with similar developmental goals include the Krishi Vigyan Kendra at Mundra, Vivekanand Gramodyog Society and C.C. Shroff Self Help Centre in Mumbai.

AGROCEL Industries Ltd. (originally AGROCEL Pesticides Ltd.) was first established in 1984-85 as a joint venture company of the Gujarat Agro Industries Corporation Ltd. (a public sector undertaking) and Excel Group of Companies, as a result of the dialogue between Kaka and the Secretary, Government of Gujarat. The initial idea was to set up a pesticide company in the Kandla Free Trade Zone, with the specific objective of producing pesticide formulations for export. Due to unforeseen circumstances, this did not materialize. Not to be deterred, the Shroff family infused the company with a new mission of serving the farmers of Kutch and other agriculturally backward regions of India. In 1989–90, the company started operations of its AGROCEL Service Centre, under the leadership of Mr. Hasmukhbhai Patel, and the Marine Chemical Factory under Mr. Manoj Gohil. In the changed circumstances, the stake of the Excel Group grew to 89%, and the company was renamed as AGROCEL Industries Ltd. In 2007, Gujarat Agro Industries Corporation (GAIC) divested its 11% holding and the company is now controlled entirely by its promoters from the Excel group and its shareholders.

The ASD of AGROCEL was established with the following mission:

To make all possible agri-inputs and marketing support available to farmers at the right time and at a reasonable cost, with all necessary technical assistance and guidance

under one roof, so that farm productivity and farmer's income levels increase along with national productivity — all these through fair deals.

ASD is committed to working for 'progressive, regenerative and sustainable agriculture'. It has two main lines of business. The first comprises farmer services, including agricultural extension, input supply, hiring of equipment, etc. The second is the marketing of organically grown produce through fair trade[3] channels. The first is aimed at building up the value chain, starting from the primary producers. The second is aimed at realizing better prices for the primary producer through better control over the value chain and by linking up with clients with similar values. As the events unfold, it becomes evident that these high-end clients can also contribute substantially to strengthening the value chain, more specifically, the primary producers.

Building the Value Chain

ASD began operations with one service centre at Koday in Kutch. Over the years, several more centres have come up in other parts of the country. As on date, there are 25 centres in 11 states run by a total of 200 employees. Together, these centres service about 45,000 farmers, covering about 5,40,000 acres of land. The turnover in agri-business has been rising steadily over the years (Table 1).

Table 1: Growth of Agriculture Service Division

Year	Farmers	Increase in Farmers (%)	Domestic (INR in lakhs)	Exports (INR in lakhs)	Total (INR in lakhs)	% Increase in Sales	Land Area (Acres)	% Increase in Land Area
1999	500		348	-	348		6,000	
2000	1,150	130.0	223	-	223	(35.92)	13,800	130
2001	2,575	123.9	300.99	72.74	373.73	67.26	30,900	123.91
2002	5,056	96.3	533.24	74.4	607.64	62.6	60,672	96.35
2003	6,098	20.6	686.13	75.28	761.41	25.3	73,176	20.61
2004	9,143	49.9	1,198.42	43.69	1,242.1	63.1	1,09,716	49.93
2005	12,978	41.9	1,171.59	154.22	1,325.8	6.7	1,55,736	41.94
2006	15,700	21.0	1,307.86	284.45	1,592.3	20.1	1,88,400	20.97
2007	25,000	27.4	2,130.15	288.84	2,419	51.9	2,40,000	27.39
2008	45,000	125.0	NA	NA	NA		5,40,000	125
2009 Exptd	60,000	33.3			0		7,20,000	33.33

Source: Purohit (2008)

About 80% of this turnover comes from input and output marketing, the remaining being the fees for certain services (mainly installation of drip-irrigation systems) offered to the farmer. The entire export sales represent output marketing, and include products such as cotton and basmati rice. Ninety-five per cent of the domestic sales represent sale of inputs like seed, organic fertilizer, and integrated pest management to farmers.

AGROCEL started working in an area by setting up a small office and hiring enthusiastic local youth with moderate education. A team comprising an agricultural field officer and a commerce graduate or chartered accountant runs each centre. The team is expected to establish a close rapport with the farmers to get a good understanding of local needs. It concentrates on designing and providing the most appropriate agronomic advice, working on the assumption that if farmers benefit from the advice, they will naturally turn to them for input supply as well. Agricultural advice is offered free of charge. This strategy has been vindicated over the years because centre after centre have been able to break even after 3-4 years of operations, and each one is now making profit.

The specific services provided by an AGROCEL Service Centre include:

- Providing Farm extension
- Aggregating demand for farm inputs and providing all kinds of inputs under one roof at a reasonable price
- Disaggregating supply and ensuring that its logistics match the time and volume requirements of farmers.
- Providing output marketing support.
- Providing, in the case of organic farming, organic certification support, and linking with the organic export and fair trade channels.

Marketing Strategy for Organic Cotton

During the course of its work, AGROCEL came across the cotton farmers of Kutch and Surendranagar Districts, who were facing economic crisis due to unstable crop prices, high use of chemical pesticides leading to increase in debt burden, degradation of environment, and consequent impact on the health of farming communities. To overcome these problems, AGROCEL came up with the idea of converting these farmers into organic/fair trade cotton producers and providing them access to the high-end European markets through fair trade distribution channels.

Initially, AGROCEL bought the organic cotton from the farmers, and sold it to the fair trade channels in Europe through its contacts. These contacts were developed over

time through participation in various international fairs such as BioFach at Nurnberg in Germany, InNaTex (International Fair of Natural and Organic Textiles), World Organic Trade Fair, etc. During one of these interactions, it came in contact with Ms Abigail Garner of UK, a fair trade specialist. On Kaka's invitation, Ms Garner stayed in India for over 18 months to train the AGROCEL team in different areas of cotton processing. Thomas Petit, a Frenchman, with expertise in textile production, joined her.

Under their supervision, many improvements were made in the processing of cotton at various stages. One of the problems faced was the old-fashioned, chemical-intensive method of washing fabric. This was contrary to the philosophy of manufacturing organic fabrics; therefore, chemicals had to be eliminated from the process. A new washing unit was designed, which used only hot water, and no chemicals whatsoever. The waste water was found to contain natural wax, and this was used for irrigation purposes at AGROCEL's demonstration farm. The unit, set up at a cost of Rs 20 lakhs, is the only one of its kind in India.

Ms Garner also assisted AGROCEL in developing a strong business model that included an integrated farming package, and management of cotton supply chain, which featured ginning, spinning, tailoring and access to the retail market. In this model, AGROCEL maintained its prime focus of providing various agro inputs and extension services to the farmers while outsourcing the task of cotton processing through its various stages to different units, usually identified by its customers. AGROCEL retained the task of marketing the output produced at each stage. The first consignment of T-shirts produced in this manner was sold through fair trade channel to OXFAM, Belgium, which turned out to be a success.

After returning to UK in 1999, Ms Garner continued to support AGROCEL. She established a company called Vericott (Vertical Integration in Cotton) Ltd. Vericott was started with the aim of working downstream to create markets for the organic and fair trade cotton produced by AGROCEL and other such organizations. Ms Garner lobbied on behalf of AGROCEL with various fair trade organizations, and helped it to get more international presence and market. Thanks to her efforts, AGROCEL connected with the NGOs, Traidcraft Exchange, and Shell Foundation. The last of these partnered with AGROCEL to help 500 farmers adopt organic methods of cotton

cultivation through a project called 'Straight from the Cotton Fields' in 2002. Shell Foundation provided seed capital to cover the start-up costs, and provided business mentoring and assistance to farmers converting to organic. It also helped AGROCEL set up global market links to ensure that the venture became successful in the long term. The project was a huge success. This project was followed by another project called 'More from the Cotton Field'.

In autumn 2005, Marks & Spencer, a multinational, high-end, retailer chain set up fair trade standards for cotton to be stocked in its stores. This opened up a new avenue for clothes made from fair trade cotton to be marketed through its stores. Given the existing work with organic cotton, organizing farmers, ensuring traceability, and record -keeping, much of the work to become certified for fair trade cotton had already been done. It was the combined effort of Shell Foundation and Vericott Exchange that led Marks & Spencer in 2006 to stock clothes made from fair trade cotton supplied by AGROCEL. As a result of this strategic move, the demand for organic cotton shot up, and more farmers were needed to supply cotton in a short time. In early 2008, AGROCEL had an order for more than 8,000 tonnes of organic cotton. It was faced with the challenge of meeting with this huge demand.

As part of this partnership, Marks & Spencer offered pre-financing, and a commitment for purchase of specified volumes of cotton. It found willing spinners in its chain, for example, Maral, instrumental in developing a working relationship with the farming groups, giving feedback on quality issues and developing a joint understanding of the needs of the supply chain. It facilitated communication between all partners in the fair trade chain, making it transparent and fostering collaborative action to achieve targets. Shell Foundation, on its part, funded development of processes to improve quality and creation of a cotton storage facility so that AGROCEL could guarantee its customer's orders throughout the year. It helped AGROCEL build its business capacity so that it could interact with an international business entity such as Marks & Spencer.

Besides Marks & Spencer, AGROCEL has over 45 domestic and international clients. Following are some of its clients:

- Bheda Brothers, Mumbai
- Mahesh Agri, Mumbai
- Maral Overseas Ltd., Indore
- Vericott Limited
- Traidcraft Plc., UK
- Oxfam, Belgium

The marketing side of the intervention, therefore, is now on a strong footing. AGROCEL's growth potential can be considered bright because it is linked to the growth of the organic and fair trade movements, which are increasingly making inroads in international markets. The growth in sales over the past eight years can be seen in Table 2.

Table 2: Growth of Sales – Organic and Fair Trade Cotton (Rs. Lakhs)

Year	G. Cotton	Yarn	Fabric	Garments	Cotton Seeds	Others	Total
2000–01	18.27	0	2.46	14.08	2.10	0	**36.93**
2001–02	36.35	30.23	0.55	9.57	3.47	0.68	**80.87**
2002–03	17.82	29.62	1.83	34.68	11.87	0.75	**96.60**
2003–04	187.28	49.14	0.88	15.60	0	0.65	**253.56**
2004–05	264.12	56.94	6.54	25.17	29.46	0.18	**382.43**
2005–06	419.87	97.26	10.66	26.94	63.20	0.40	**618.34**
2006–07	561.93	273.06	4.80	30.08	92.13	0	**962.02**
2007–08	998.16	519.96	12.07	57.76	194.69	0	**1,782.65**

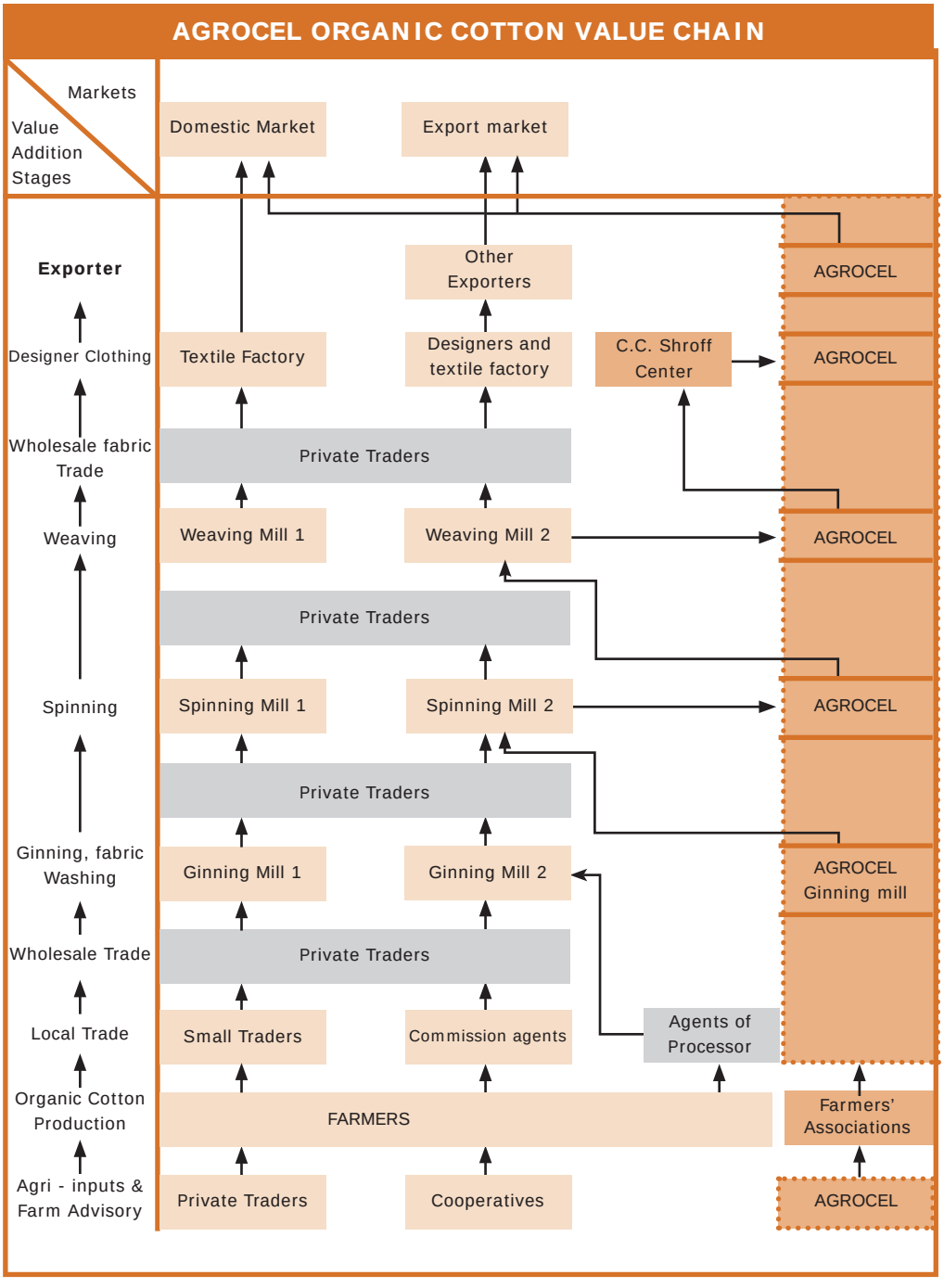
Figure 1 shows the map of the pro-poor organic cotton value chain developed by AGROCEL.

Organizational Strategy

AGROCEL is a registered private limited company. The ASD has adopted a decentralized organizational structure. A skeletal head office, located at Mandvi, Kutch, guides 25 service-centres spread all over the country. The Executive Director (ASD) reports directly to the Managing Director and the Board of Directors. He is supported by Finance and Administration unit and assisted by eight Project Managers. Whereas some projects deal with sectors such as drip irrigation, cotton, food crops, and export; others are based on regions, for example, South India, West Bengal, and Orissa. Different centres are aligned to different projects and work under concerned project managers. Each service centre has a Centre-in-Charge, who is assisted by one or two field officers, a person with a background in accounts, and a storekeeper.

The Garment Production and Export Division, located in Mumbai, manages the marketing function with a four-member team. The Mumbai office works closely with the Executive Director to coordinate the supply of produce. It handles the export of yarn through a clearing and forwarding agent, who gets the customs clearance. For the manufacture of garments, it coordinates with C.C. Shroff Centre, which has a tailoring wing. The centre has 50 employees. In addition, it works with teams of ten tailors and a master tailor, who can be given job work when the orders are large.

Figure 1


AGROCEL ORGANIC COTTON VALUE CHAIN
Markets
Value Addition Stages
Domestic Market
Export market
Exporter
Other Exporters
AGROCEL
Designer Clothing
Textile Factory
Designers and textile factory
C.C. Shroff Center
AGROCEL
Wholesale fabric Trade
Private Traders
Weaving
Weaving Mill 1
Weaving Mill 2
AGROCEL
Private Traders
Spinning
Spinning Mill 1
Spinning Mill 2
AGROCEL
Private Traders
Ginning, fabric Washing
Ginning Mill 1
Ginning Mill 2
AGROCEL Ginning mill
Wholesale Trade
Private Traders
Local Trade
Small Traders
Commission agents
Agents of Processor
Organic Cotton Production
FARMERS
Farmers' Associations
Agri - inputs & Farm Advisory
Private Traders
Cooperatives
AGROCEL

As for the knitted fabric, the marketing division outsources the work to a garment unit in Mumbai, which makes the T-shirts as per the designs specified by AGROCEL and its clients. The centre relies on Shrujan and Vericott Exchange to provide inputs for design and embroidery. Customers too send their designers, and get samples made and approved, three seasons in advance. This is done during a week-long, annual, design workshop organized by the marketing division on behalf of all the Shroff institutions.

Being a part of the fair trade movement, AGROCEL has started taking several new initiatives to strengthen the movement in India. It has started a new support institution for fair trade in Mumbai called International Resources for Fair Trade as a nodal agency of Tradecraft. It is setting up an Organic Park near Dhrangadhra in Gujarat, with the objective of promoting organic and fair trade practices among producers and consumers.

Under the fair trade project, AGROCEL has initiated farmers' associations, which will form the project executive body whereas AGROCEL will function as the project promoting body. The fair trade people wanted cooperatives to be registered. However, since the local people have burnt their fingers with this form of institution,[4] they decided to register their organization as a society or a trust. So far, nine such institutions have been formed, each with a membership of between 1,500 and 2,000 farmers. These are named after the commodity with which the farmers work. For instance, AGROCEL Pure and Fair Cotton Growers' Association in Gujarat, AGROCEL Rice Growers' Association in Haryana, AGROCEL Fruits and Nuts Growers' Association etc. AGROCEL is in the process of empowering the associations to take up much of the work being done by the Agri-service centres. Already the Field Officers have been withdrawn in some cases, and the associations have taken up the management of the centres.

Another strategy being deployed by AGROCEL is to work through other local NGOs. For example, in Syala, it has collaborated with Aga Khan Rural Support Programme-India (AKRSPI) to work with cotton farmers under the organic and fair trade project. It is working with the Centre for Environmental Education to establish sugar beet cultivation and popularize drip irrigation. In Raichur, Karnataka, it is working with the Navnirman Trust to revive cultivation of cotton.

Figure 2 shows the Actor-Function matrix of the initiative. The matrix shows that currently AGROCEL undertakes major commercial functions in tandem with its partner company Varicott India Pvt. Ltd.[5] Other partners contribute to design, outsourcing, etc., and finance is raised from commercial banks. The welfare function is entirely taken care of by farmers' associations. These organizations have, of late, also started taking up some responsibilities of organizing crop advisories, providing finance to farmers, and

Figure 2: Actor-Function Matrix of Organic Cotton VCI

Functions	Farmer	Farmers' Associations	AGROCEL - ASD	C.C. Shroff Centre	Shrujan	Shell Foundation	Vericott India Pvt. Ltd.	Retail Customers such as Marks & Spencer	International Resources for Fair Trade	Spinning and Weaving Mills	Commercial Banks
Cotton Production											
Production	√										
Crop Advisory		(√)	√								
Pre-finance		√	√			√					
Input Supply		(√)	√								
Aggregation of Produce		(√)	√								
Procurement			√								
Organic and Fair Trade Certification			√								
Ginning											
Ginning (In-house)			√								
Marketing Organic Cotton			√								
Storage and Logistics			√								
Financing Ginning			√								√
Spinning											
Outsourcing Spinning			√							√ Maral Overseas,	
Storage and Logistics			√							Sri Ramkrishna	
Financing Spinning			√								√
Marketing Yarn			√								

Continued...

Functions	Farmer	Farmers' Associations	AGROCEL - ASD	C.C. Shroff Centre	Shrujan	Shell Foundation	Vericott India Pvt. Ltd.	Retail Customers such as Marks & Spencer	International Resources for Fair Trade	Outsourcing Companies	Commercial Banks
Weaving											
Outsourcing Weaving and Dying			√							√ Arvind Mills,	
Storage and Logistics			√							Colour of Nature, etc	
Financing Weaving			√					√			√
Inputs for Design			√		√		√	Credit			
Marketing Organic Fabric			√				√	√			
Garment Making											
Tailoring				√	√						
Outsourcing Knitted T-shirts			√								
Design Inputs				√	√		√			√ Maral Overseas, Ashima Garments	
Storage and Logistics			√					√			
Financing Garment Making			√								√
Customs Clearance and Exporting			√								

Continued...

Functions	Farmer	Farmers' Associations	AGROCEL - ASD	C.C. Shroff Centre	Shrujan	Shell Foundation	Vericott India Pvt. Ltd.	Retail Customers such as Marks & Spencer	International Resources for Fair Trade	Outsourcing Companies	Commercial Banks
Export Marketing											
Attending International Fairs			√			√	√				
Fair Trade Fortnight for Consumer Awareness			√			√	√				
Sector Development											
Organic and Fair Trade Park			√								
Standards			√						√		
Research & Policy Advocacy									√		
Consumer Awareness			√						√		
Natural Resource Conservation		√									
Welfare Functions											
Health		√									
Education		√									

√ Main Function (√) Supporting Function

aggregating produce for procurement by AGROCEL. This is also seen as a strategy to scale up the project, in line with fair trade ethics and values. However, at present, the legal framework of the association prevents it from taking a more active role in the commercial functions. In future, they may have to establish producers' companies if they want to take over commercial functions from AGROCEL. The farmers are averse to forming cooperatives because of past experiences, which were rather negative. At present, farmers' committees are implementing three functions. The first is a development function because it involves the conservation of natural resources, with activities such as rainwater harvesting, social forestry, horticulture development, drip-irrigation, etc. The other two are mainly welfare functions, namely, health (life insurance of farmers, medical camps, medical help to the poor, etc.), and education (scholarships to deserving students, drinking water in schools, provision of uniforms, computers, science kits, etc.).

Impact on Farmers

An independent study by Traidcraft, UK, (Pereira and Betts 2005) found that cotton farmers working with AGROCEL had shown, on an average, a 15% increase in their income. A more recent study by Jackson (2008) concluded, "Yields of organic cotton in Kutch are similar to and in individual cases often in excess of those obtained under the preceding non-organic system." The study, however, cautioned that similar results would be difficult to emulate in wetter and more highly irrigated parts of India where climatic and other factors make cotton more susceptible to pest attacks.

To measure the impact on cotton cultivators, Purohit (2008) carried out a price-spread analysis on behalf of the International Resources for Fairer Trade. Tables 3 and 4 show the margin analysis, with and without intervention. As the tables show, the value per kilogram of cotton fibre increases tremendously after the ginning stage. The analysis shows that the margin received by farmers as percentage of sales value under conventional methods is only 16.67%. This margin has increased to 25.92% under intervention. (The fair trade and organic premium is 10-13% and approx 8% of the farm gate price). The share of price obtained by farmers as percentage of the terminal price increased only marginally from 5.86 to 6.67%.

The profit margin of ginning units is very low (2–2.5%) because the activities involved in ginning is very little whereas the margin of spinning units is higher as compared to others in the supply chain because it requires a very high start-up capital investment. These also generate substantial returns because the minimum batch size for spinning at most spinning mills is 15 tonnes. While outsourcing the spinning activity, AGROCEL works on optimum batch size, which helps in keeping the final product price competitive.

Table 3: Margin Analysis: AGROCEL Model (Rs)

Particulars	Farmer	Ginning	Spinning	Weaving	Dying	Garment Making	Global Retailer
Procurement Cost	22.00	29.70	38.55	63.82	74.53	114.83	181.79
Processing/ Marketing Cost		8.00	16.00	7.50	28.00	25.00	210.00
Average Cost Price	22.00	37.70	54.55	71.32	102.53	139.83	391.79
Average Selling Price	29.70	38.55	63.82	74.53	114.83	181.79	450.55
Profit	7.70	0.85	9.27	3.21	12.30	41.95	58.77
Profit Margin (Per Cent)	30 to 35	2 to 2.5	13 to 20	4 to 5	10 to 15	25 to 35	15–25
Margin as % Sales Price	25.92						
Farmers' Share in Terminal Price (%)	6.67						

Table 4: Margin Analysis: Conventional Model (Rs)

Particulars	Farmer	Ginning	Spinning	Weaving	Dying	Garment Making	Global Retailer
Procurement Cost	22.00	26.00	32.72	56.07	67.07	98.77	151.62
Processing Cost/ Marketing Cost		6.00	15.00	7.50	27.00	25.00	200.00
Cost Price	22.00	32.00	47.72	63.57	94.07	123.77	351.62
Average Selling Price	26.00	32.72	56.07	67.07	98.77	151.62	450.00
Profit	4.00	0.72	8.35	3.50	4.70	27.85	98.38
Profit Margin (Per Cent)	15 to 20	2 to 2.5	15 to 20	5 to 6	3 to 7	20 to 25	20 to 35
Margin as % Sales Price	16.67						
Farmers' Share in Terminal Price (%)	5.86						

As on 2008, AGROCEL's product-mix, representing cotton at various stages of processing, is as follows: fibre (40%), yarn (40%), fabric (5%), and ready-made garments (15%). At each level, AGROCEL charges 1–3 % service charge, which contributes to its profitability, and makes the system financially sustainable.

Besides the economic impact, there have been clear environmental gains in terms of better health practice, soil conservation, better usage of water and energy, and use of appropriate technologies. Young people in the area are taking up agriculture rather than migrating to cities in search of employment. Decreased migrations to urban areas have been observed from the project area. Parents are able to retain their children in schools, and material prosperity is observed in the fair trade/organic cotton farming areas. There is a definite shift towards empowerment of marginal farmers through skill development and farmers' organizations.

Future Plans

AGROCEL is planning to take the production of organic and fair trade cotton and other crops to the next level through a futuristic project. The project, called Organic Park, has been planned near Dhrangadhra, about 60 km from Ahmedabad. The total investment in the project is about Rs 80 million, for which finance has been arranged from the Bank of Baroda. The main features of the project are:

- Training school for farmers and field officers, with a capacity of 50 per batch
- Soil water and cotton testing laboratory
- Organic seed bank
- Input depot
- Ginning and pressing oil mill for organic cotton seed
- Cleaning, grading and packaging houses for organic pulses, food grains, and oil seeds
- Fibre yarn bank
- Agri-output warehousing facility
- Retail outlet for organic produce
- Eco-tourism and organic restaurant
- Knowledge centre for farmers

This futuristic centre will serve the dual purpose of serving as a resource centre for potential organic and fair trade farmers, and as a means of creating awareness among potential customers in India.

In addition, AGROCEL is planning three retail outlets — in Mumbai, Dhrangadhra, and Mandvi — for fair trade and organic produce.

In order to facilitate its expansion plans, AGROCEL plans to become a listed company in the near future and increase its equity base. When this happens, farmers associated with its projects will be given priority in shareholding.

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End-notes

1. Based on various studies (see references) and information provided by Hasmukhbhai Patel, General Manager Service Division, Agrocel

2. For more information on the bromine factory, see Kamath, M.V. 2000. ***The Excel Story: A Study In Excellence*** *pp. 160-163.*

3. "Fair trade is a trading partnership, based on dialogue, transparency and respect, which seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers – especially in the South." The above is the currently accepted definition of fair trade, as agreed by FINE, an informal association of four international fair trade networks (Fairtrade Labelling Organizations International, International Fair Trade Association, Network of European Worldshops, and European Fair Trade Association).

4. Cooperatives have suffered from political problems, leading to the ultimate closure of many successful cooperatives. The latest example in the list of cooperatives that faces liquidation is GROWFED.

5. AGROCEL has a 10% stake in Vericott India Pvt. Ltd. The company takes care of the design inputs and marketing of organic produce abroad.

2 The Silk Route to Livelihood Augmentation: PRADAN's Tasar Silk Intervention in Jharkhand[6]

Overview of Intervention

PRADAN's intervention in sericulture started in 1988 when it took up wasteland development with the support of the National Wasteland Development Board. To provide a natural canopy, Arjun tree, which is a host tree for the breeding of tasar silkworm, was planted. It was soon realized that a few improvements such as the use of protective nets against predators and prophylactic spraying of pesticides could bring about dramatic improvements in traditional sericulture, and make the activity an economically attractive livelihood option.

A collaboration between the Union Ministry of Rural Development (MoRD), Central Silk Board (CSB), and PRADAN led to the direction of large-scale public finances to remote villages, enabling over 10,000 families below the poverty line to gain robust livelihoods in tasar sericulture. This collaboration has taken place through two special Swarnjayanti Gram Swarozgar Yojana (SGSY) projects, one each for Bihar and Jharkhand. Whereas the MoRD provided the finances, CSB provided both funds and technology, and PRADAN implemented the projects. A total of Rs 187.0 million has been invested in the SGSY projects, which include Rs 89.3 million from MoRD, Rs 16.1 million from CSB, Rs 36.8 million as credit from banks and SHGs, and Rs 44.8 million from people's contribution.

PRADAN worked on various elements of the tasar value chain to reduce uncertainty, increase productivity, and help the poor people retain more of the added value. Small-scale private grainages, plantations on private wastelands, improved package of silkworm rearing, and yarn production in common facility centres are the key components of the projects. The key elements of the strategy adopted are as follows:

- Promoting hamlet-level groups of rearers called Tasar Vikas Samitis (TVS) to ensure participation of rearers at every stage.
- Promoting scientific rearing practices to reduce diseases and mortality among silkworms.
- Raising plantations of tasar host trees on privately owned wastelands.
- Promoting village-based, tasar egg-production centres called grainages,

owned and operated by someone in the village to earn a living, and thereby, ensuring a supply of disease-free layings (DFLs) of the tasar moth at the village level.

- Taking special measures to deal with the risk in production, including prophylactic measures, rearing early stage worms to ensure protection against predators, and insurance for the crop, the rearer, spouse and one dependent, especially a girl child.
- Promoting tasar yarn production among women in poor and marginalized communities, and creating common facility centres in villages for the same.
- Promoting a producers' company of women yarn producers, which will aggregate all the yarn produced by various groups and sell it at Bhagalpur market, rest of the country, and export market.
- Conducting motivational training to enable cocoon and yarn producers to set higher goals.
- Building linkages for material inputs, credit, and marketing.
- Establishing a specialized marketing organization to market hand-woven, off-the-loom made-ups such as stoles, scarves, shawls, and sarees into which the fabric can be converted.

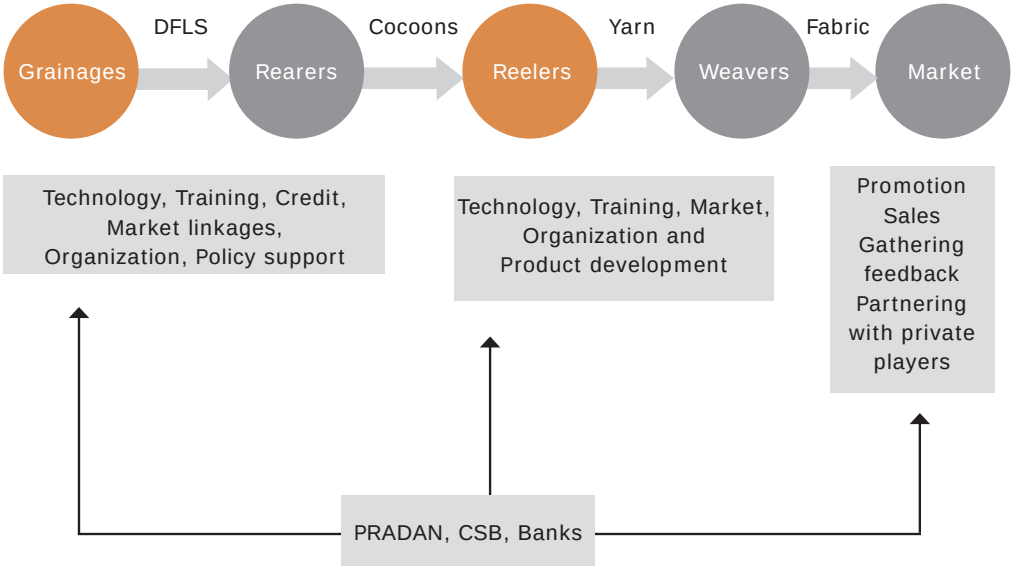
Reconstructing the Value Chain

Production of tasar silk involves rearing silkworms to produce the cocoons, and processing the cocoons to make yarn and fabric. Tasar silkworms eat leaves of *asan (Terminalia tomentosa)* and *arjuna (Terminalia arjuna)* trees during the larval phase of their life cycle in forests or plantations. The larval phase ends with the spinning of silk cocoons. Silk is extracted from the cocoons to make yarn that is woven into fabric (Figure 1).

In this value chain, PRADAN's contribution has been to create two new steps: a) grainage producers and b) reelers. In the first step, local entrepreneurs produce DFLs on a scientific basis with the technical collaboration of CSB. By 2007-08, further backward integration into the production of basic seed (not shown in diagram) took place, which ha been a serious constraint for grainage producers in the past. The basic seed was earlier produced by CSB but now grainage entrepreneurs have been encouraged and supported to supply seed DFLs as well. Yarn making was traditionally done by the weavers' wives through a crude method, using their hands and thighs.

This involved drudgery, and productivity was poor. Now, reeling is taken up by the women's SHGs as an independent activity with the help of improved machines.

Figure 1: Value Chain in Tasar Sericulture



Key Achievements

Growth in production

The production figures for the year 2007–08 were as follows:

i. Tasar host plantation: 1254 ha

ii. Production of cocoon: 45 million, worth about Rs 50 million

iii. Production of yarn: 7.88 tonnes, worth about Rs 14.18 million

iv. Value added fabric production: 1.6 lakhs running metres worth Rs 26 m

Productivity and price realization

The intervention has had a major impact on productivity when compared to the traditional methods of sericulture. Cocoon rearing productivity has improved more than four times whereas the duration of the crop cycle has been brought down from 90 to 70 days. Earlier, cocoon rearers could hope to realize a crop only once in four years. Now, with new technology and assured DFLs, they are assured of a crop every year. The average annual income for all four categories of primary producers (producers of DFLs,

cocoons, yarn, and fabric) increased substantially, ranging from 58% to 242%. A comparison between the price-spread, with and without the intervention, showed a dramatic increase in the share of the target population from about 30% to 75% (elaborated in section on economic impacts).

Impact on family income (2007–08)

The average annual income per family at the end of 2008 was estimated at Rs 10,500, 12,000, 14,250 and 16,000 for grainage entrepreneurs, cocoon producers, yarn producers and weavers, respectively. The previous year's estimate of the average income of cocoon producers was Rs 7,565, and that of yarn producers was Rs 5,315. This shows substantial increase in income of 58.6% and 168.1%, respectively. These increases are attributed to the use of new technology for grainage production and improved spinning and reeling machines.

Institutional Strategy

Different institutions have been created at different nodes of the value chain to either support or empower the producers (Table 1). Nano-entrepreneurs and local service providers also fill in the gaps, working in tandem with these institutions. Each of these nodal institutions has created linkages with external resource institutions to cater to the needs of their clients. MASUTA producer's company, promoted by 60 Mutual Benefit Trusts (MBTs) of women reelers is the key people's institution that has, in turn, spawned other specialized institutions. In 2007, MASUTA floated a private limited company to market value-added products made of tasar silk supplied by it. More recently, it has collaborated with the state government-promoted Jharcraft to promote a special joint venture to look after procurement and storage of cocoons because the production of cocoons is seasonal — only in the month of December. The step was taken in order to ensure year-round supply of cocoons to its producers.

Table 1: Institutional Arrangements – Tasar Silk Sector

No.	Nodal Point in Value Chain	Institution / Functionary	Broad Role
1	Basic seed production	Grainage entrepreneurs	To produce own supply of basic seed DFLs for the production of DFLs
2	Grainages or DFLs production	Grainage entrepreneurs	To provide quality DFLs to cocoon rearers
3	Cocoon production	Individual rearers drawn from SHGs; guided by local service providers, and belonging to cluster-level samitis	To produce cocoons, and supply to the next level in the value chain
		Tasar Vikas Samiti at the cluster level with 300-350 rearers	To aggregate the production of tasar cocoons for selling in the open market as well as to the producers' company
		MASUTA, producer company, at multi-state level	To procure cocoons, sort and store these, and supply to reeling units
4	Yarn production	MBTs at the village/cluster level with about 30 women reelers	To manage the reeling centres
		MASUTA, producer company, with a membership of over 60 MBTs, at multi-state level – majority being in Jharkhand	To supply quality cocoons in adequate quantity to the reeling units
		Tasar Cocoon Development Company, joint venture of Jharcraft (federation of weavers promoted by state government), and MASUTA	To procure cocoon requirements for the entire year during the season in December, and to stock it and supply to reeling units of both MASUTA and Jharcraft.
5	Fabric production	MASUTA producer company	To market or facilitate marketing of yarn to weavers after grading and quality control
		Eco-Tasar Silk Pvt. Ltd., a private company at the national level, promoted by MASUTA (majority share capital) along with a marketing professional	To get fabric made as per market requirements by outsourcing to weavers, dyers, finishers, and to get inputs from designers
6	Marketing	Eco-Tasar Silk Pvt. Ltd., a private company	To cater to the export, and domestic market for yarn and fabric

Marketing Strategy[2]

Earlier MASUTA producers' company used to take care of the marketing of yarn, which was the main product. The yarn was sold mainly in the local Bhagalpur market, a centre for manufacture and trade of tasar silk yarn. Since October 1, 2007, the marketing unit has separated as a private company called Eco-Tasar Silk Pvt. Ltd. The company has been promoted by MASUTA (which has 90% share capital) along with a marketing specialist who serves as the CEO of the company. The newly formed company has started manufacture and sale of value-added products from part of the yarn produced by MASUTA, leaving the rest to be marketed by its parent company. During the year 2007–08, MASUTA produced about 9 tonnes of yarn, of which about half was sold by the parent company and the rest taken up by Eco-Tasar for value addition.

Since MASUTA produces only weft yarn and not warp yarn, Eco-Tasar has to purchase an equal amount of warp yarn from the market before it can produce fabric. Eco-Tasar has an office in Bhagalpur, which coordinates the outsourcing of weaving to handloom weavers. It has another office in New Delhi to take care of the marketing function. The value-added products sold by Eco-Tasar include hand-woven fabric, stoles, scarves, *dupattas, sarees*, ties, jackets, and throws, which are sold through large stores and boutiques such as FabIndia, Kalaniketan, Aavran, Shilpi, Swabhumi, Casablanca, and Fine Things in the domestic market all over the country. Currently, the fabric is not sold as a branded product since the clients prefer to use their own brands. The products are also being exported to the USA, Canada, Italy, Spain, the Netherlands, Japan, and Australia. Exports account for about 25% of the turnover, the main product line being stoles. The sales figures for the past two years show that the company is on a growth trajectory, the sales turnover having jumped from Rs 15.83 million to 26.73 million representing an increase of 68.98% within a year of its existence.

In all its marketing decisions, the Eco-Tasar management has never lost track of the fact that it exists in order to ensure sustainable livelihoods for its promoters, who represent the poor families of forest dwellers and artisans of Jharkhand. Each woman reeler produces, on an average, 25 kg of yarn per year. Eco-Tasar is committed to market the produce in such a way that the growing number of producers can be accommodated without having to suffer a lower price for their cocoons or yarn.

Marketing of yarn

In the early days (2000–01), when MASUTA was marketing yarn, the local market was using either Korean yarn or locally produced yarn. The yarn produced by the producers' company was different on account of the reeling technology introduced by it. Hence, the marketing division had to explore new markets such as in Bhuj, Uttarakhand, and Kanjivaram where

such yarn could be incorporated into local designs. In 2005, however, there was a major crop failure. The local cocoon producers were unable to recover. The resultant shortage in the market led to the entry of Chinese tasar yarn in a big way. However, weavers still prefer Indian yarn to Chinese yarn, which is different in quality. In the present scenario, MASUTA has no difficulty in selling its yarn because it is in a seller's market. Whereas about 2,500 tonnes are imported (illegally) to the Bhagalpur market, less than 300 tonnes are produced locally. There is, therefore, a lot of scope for growth in the market.

Marketing value-added products

MASUTA had been selling yarn of two types – spun and reel. The ratio of spun to reel yarn was about 60:40 till 2003–04. Spun yarn was thicker and was used for furnishing fabric, which was a specialty of Bhagalpur market. Since MASUTA introduced reeling machines, the proportion of reel yarn gradually started increasing, and soon became the main yarn. MASUTA started manufacturing stoles from 2003 onwards, in order to accommodate reel yarn. This led to increased profitability because it was a value-added product. However, by 2006, the marketing unit realized that in order to accommodate the growing volumes of reel yarn, it would have to produce 1.5 lakh stoles per year, which would be very difficult to dispose of in the market. Hence, it decided to enter the saree making business even though the latter had much less value addition as compared to stoles. At present, Eco-Tasar manufactures about 26,000 stoles and scarves per year worth about Rs 10 million.

Economic Impacts of the Intervention

Price Spread Analysis

Tables 2 and 3 provide a summary of the price spread analysis without and with the intervention, respectively. As the tables show, a dramatic increase in the share of the target population from about 30% to about 75% has taken place as a result of intervention over a period of 20 years. If one were to discount the share of people's institutions, considering it as a cost of the intervention, and look at only the share of the primary producers (grainage entrepreneurs + silkworm rearers + reelers + weavers), it comes to 61.4%, which is more than double of the share without intervention.

Table 2: Price Spread and Share of Target Population in Terminal Price — without Intervention

No.	Name of Actor in Value Chain	Share of Terminal Price (Rs)	Share of Terminal Price (%)	Target Population's Share of Terminal Price
1	Silkworm rearer	4,000/-	22.2	22.2
2	Petty trader	2,000/-	11.1	
3	Cocoon hoarder	2,500/-	13.9	
4	Weaver	1,500/-	8.3	8.3
5	Agent	1,500/-	8.3	
6	Fabric wholesaler	2,000/-	11.1	
7	Retailer	4,500/-	25.0	
	Total	**18,000/-**	**100.0**	**30.6**

Table 3: Price Spread and Share of Target Population in Terminal Price — with Intervention

No.	Name of Actor in Value Chain	Share of Terminal Price (Rs)	Share of Terminal Price (%)	Target Population's Share of Terminal Price
1	Grainage entrepreneur	450	2.5	2.5
2	Silkworm rearer	6,050	33.6	33.6
3	MBT of yarn producers	250	1.4	1.4
4	Reeler or yarn producer	2,513	14.0	14.0
5	MASUTA producers company	713	4.0	4.0
6	Weaver	2,025	11.3	11.3
7	Eco Tasar Private Ltd. company	1,500	8.3	7.47†
8	Retailer/Eco Tasar retail outlet	4,500	25.0	0.73*
	Total	**18,000**	**100.0**	**75.0**

†MASUTA's share in Eco Tasar company being 90%.

*Based on proportion of total sales that is retailed.

Source: Prepared by Satyabrata Acharya

Economic benefits to primary producers

Table 4 presents a summary of the actual gains to these primary producers, in terms of increase in employment and income, and the extent of coverage, in terms of families involved in various production activities.

The following conclusions can be drawn about the benefits to primary producers in the region due to this intervention:

Table 4: Economic Benefits to Primary Producers

No.	Nature of Benefit	Grainage Entrepreneur	Cocoon Producer	Yarn Producer	Fabric Producer	Total
	Annual Employment (person-days)					
1	Without intervention	-	75	-	135	210
2	With intervention	30	75	230	160	495
3	Increase in employment	30	0	230	25	285
4	% Increase	100	0	100	18.51	135.7
	Average annual income/ family (Rs)					
4	Without intervention	-	3,500	-	10,125	13,625
5	With intervention	10,500	12,000	14,250	16,000	52,750
6	Increase in income	10,500	8,500	14,250	5,875	39,125
	% Increase	100	242.85	100	58.02	287.15
	Active producers (no.)					
7	Without intervention	-	27,500	-	8,250	35,750
8	With intervention	1,600	42,500	12,500	8,250	64,850
9	Increase in producers	1,600	15,000	12,500	0	29,100
	% Increase	100	54.54	100	0	81.4
10	**Regional increase in annual employment (million person-days)**	0.048	1.125	2.875	0.206	4.254
11	**Regional increase in family Income (Rs in million)**	0.315	127.500	178.125	48.469	354.409

i. Introduction of new technology resulted in the creation of two additional livelihood options along the value chain, and increases in annual employment, ranging from 30 to 230 person-days per family.

ii. Average annual income for all four categories of producers increased substantially, ranging from 58% to 242%.

iii. After the intervention, all producers are earning at least Rs 10,000 annum, with the weavers earning the maximum income at Rs 16000.

iv. The number of active silkworm rearers increased by 15,000 due to intervention whereas there was no increase in the number of weavers.

v. The total number of people employed in the value chain at the primary level increased by 29,100 taking the total to 64,850, representing an increase of 81.4%.

vi. The total annual increase in employment for the region is estimated at 4.25 million person-days, and the total increase in family income for the region is estimated at about Rs 354 million.

Social Impacts of the Intervention

Empowerment

The project has led to empowerment across the value chain, especially due to:

- Access to credit and new livelihood options
- Access to employment during the off-season thereby increasing the staying power in the village (as opposed to stress migration of the past)
- Freedom of women from the drudgery of traditional methods of reeling
- Demystification of technology, and development of scientific attitude and temper
- New technological and managerial skills
- Ability to negotiate in the market
- Overall improvement in economic status

Table 5A & 5B show the actor-functions matrix before and after the intervention respectively. Table 5B shows that by now most of the production activities and much of the marketing is handled by a combination of people's institutions and service providers. PRADAN's inputs are limited to quality control and production control. Besides that, PRADAN is involved in various sector development activities such as training and capacity building, documentation, policy advocacy, research and development.

Table 5A: Actor-Function Matrix for Tasar — Before Intervention

No.	VALUE CHAIN NODES	FUNCTIONS	Individual Rearer	Money-lenders	Petty Traders	Cocoon Hoarders	Individual Weavers' Households	Master Weavers or Agents	Fabric Traders	Dept. of Sericulture	CSB/Other Research Institutions
1	**Grainage**	Nucleus Seed Grainage									
		Investments for grainage									√
		Quality control for seeds									√
		Basic Seed Grainage									
		Investments for grainage									√
		Quality control for seeds									√
		Commercial Seed Grainage									
		Investments for grainage								√	√
		Quality control for Seeds								√	
2	**Silkworm Rearing**	Nucleus Seed Rearing									
		Investment on rearing									√
		Maintenance of flora									√
		Production control									√
		Basic Seed Rearing									
		Investment on rearing								√	√
		Maintenance of flora								√	√
		Production control								√	√
		Commercial Rearing									
		Collection of Seeds	√	√	√						
		Investment on rearing	√	√							
		Maintenance of flora	√								
		Production control	√								

3	**Cocoon Procurement, Aggregation and Storage**	Investments on godowns, etc.			√	√					√
		Working capital		√	√	√					√
		Procurement and aggregation		√	√						√
		Storage, stifling and safe keeping		√	√	√					√
		Disaggregation				√					√
4	**Fabric Production**	Working capital		√			√	√			
		Processing of cocoons/Yarn production					√				
		Supply of fabric design		√				√	√		
		Execution of orders for fabric, made-ups		√			√	√			
5	**Fabric Marketing**	Working capital for stock						√	√		
		Market trend watch and product promotion							√		
		Developing wholesale, retail chains							√		
		Establish and manage showroom							√		
		Client servicing		√					√		
		SECTOR DEVELOPMENT ACTIVITIES									
	Promotion of the Sector	Developing plan for the 5-year Plan period									√
		Developing state seri plan and monitoring								√	√
		Research and development									√
		Policy advocacy									√
		Bringing in investments for the sector								√	√

Table 5B: Actor-Function Matrix for Tasar Value Chain — After Intervention

No.	VALUE CHAIN NODES	FUNCTIONS	ACTORS										
			SHGs	Tasar Vikas Samiti	Farmer/ Rural Entrepreneur	MBT	MASUTA PCL	Eco-Tasar	Service Providers of PIs	PRADAN	Govt/ Jharcraft	Banks	CSB/ Other Research Institutions	Professional Experts
1	**Raising Plantations**	Investments for raising plantation		√							√		√	
		Nursery raising		√	√				√					
		Interculture and protection		√	√				√					
2	**Grainage Production**	Nucleus Seed Grainage												
		Investments for grainage		√									√	
		Quality control for seeds		√						√			√	
		Basic Seed Grainage												
		Investments for grainage		√	√							√	√	
		Quality control for seeds		√	√				√	√			√	
		Commercial Seed Grainage												
		Investments for grainage		√	√						√	√	√	
		Quality control for Seeds		√	√				√					
3	**Silkworm Rearing**	Nucleus Seed Rearing												
		Investment on rearing		√									√	
		Maintenance of flora		√	√				√					
		Production control		√	√				√	√			√	
		Basic Seed Rearing												
		Investment on rearing		√	√				√		√		√	
		Maintenance of flora		√	√				√					
		Production control		√	√				√	√			√	
		Commercial Rearing												

		Investment on rearing	√	√	√				√		√	√		
		Maintenance of flora	√	√	√				√					
		Production control		√	√				√					
4	**Cocoon Procurement, Aggregation and Storage**	Investments on Godowns, etc.		√							√		√	
		Working capital					√				√	√		
		Procurement and aggregation		√	√		√		√					
		Storage, stifling and safe keeping		√			√		√					
		Disaggregation				√	√							
5	**Yarn Production**	Invest. on Common Facility Centre				√					√		√	
		Working capital				√						√		
		Maintenance CFC and equipment				√								
		Production monitoring and quality control				√	√		√					
6	**Yarn Aggregation**	Investments on storage and equipment					√				√		√	
		Working capital for stock					√					√		
		Collection of yarns from MBTs					√		√					
		Sorting, grading, packaging, storage					√		√					

Continued...

No.	VALUE CHAIN NODES	FUNCTIONS	ACTORS											
			SHGs	Tasar Vikas Samiti	Farmer/ Rural Entrepreneur	MBT	MASUTA PCL	Eco-Tasar	Service Providers of PIs	PRADAN	Govt/ Jharcraft	Banks	CSB/ Other Research Institutions	Professional Experts
7	**Yarn Marketing**	Investment for product promotion					√							
		Product promotion					√		√				√	√
		Servicing buyers					√		√					
		Credit recovery					√							
8	**Fabric Production**	Mobilizing working capital for stock					√	√				√		
		Design development						√	√					√
		Executing orders — fabric, made-ups						√	√					√
		Managing stock and inventories						√	√					
9	**Fabric Marketing**	Mobilizing working capital for stock					√	√				√		
		Market trends: product promotion						√						√
		Developing wholesale, retail chains						√						
		Establish and manage showroom						√						
		Client servicing						√	√					

Continued...

SECTOR DEVELOPMENT ACTIVITIES														
	Promotion of the Sector	Survey of the overall sector							√	√				√
		Identifying intervention nodes								√				
		Selection of beneficiaries	√	√						√				
		Developing training module												
		Conducting training		√					√	√				√
		Hand-holding		√			√	√	√	√				
		Influencing government	√		√		√	√	√	√				√
		Sensitizing banks					√	√	√	√				√
		Research and development					√	√	√	√				√
		Policy advocacy							√	√				√
		Documentation and dissemination					√		√	√				√

In the early years, PRADAN used to provide many of the services to the producers directly from its Tasar Development Centre in Ranchi. This centre incubated the entire activity within PRADAN, and tested its economic viability before creating independent producer-centric institutional forms. It was later hived out into a separate, legal entity under the control of the producers themselves. The MBTs of weavers came together to form the MASUTA Producers Company, (registered under Section 581C(5) of the Indian Companies Act), which aggregates production to deal effectively with the market. MASUTA began to gain control over the value chain through both backward and forward integration, with hand-holding support from PRADAN.

Scientific Temper and Outlook

For the tribals in Santhal Parganas, the *asan* tree and tasar are deeply interwoven in their culture, and form part of the mythology associated with God Kalu. Hence, the Santhals also worship the *asan*, and tasar culture itself is seen as a form of worship of Lord Shiva. This is also one of the reasons that the *asan* tree has been conserved whereas other trees have fallen to the axe. Without doubt, the activity is highly compatible to the local culture and skills, and will go a long way in strengthening the same.

At the same time, the intervention has helped to break some myths, and bring about a more scientific attitude to cultivation. Earlier, people believed that they would get only one crop in a four-year cycle. They accepted it as a gift of Lord Shiva. Now that they see the role of modern technology, they have begun to question such beliefs. It will also have a positive impact on the ecology as has already been seen in Dhumka, Godda and other regions, where the tribal communities have actively started protecting the forests in which *asan* trees are found.

Gender equity

Earlier there was a taboo against women taking up this activity, on the basis of cleanliness. Now, this is changing and women also go to the forest to collect worms. Weaving was traditionally done by weavers' wives through a crude method, using hand and thighs. The drudgery involved in such a method has been eliminated with the introduction of modern machines. With increased income from the reeling and the spinning activities, the status in the family and society has also gone up.

Future Plans

Currently, the cocoon producers and the grainage entrepreneurs are still dependent on CSB for nuclear seed material. In due course, they will be in a position to prepare this as well, gaining total control over the production chain for cocoons. The cocoon producers are still dependent on forests to raise cocoons. Under the programme, new *asan* plantations have been taken up, in private wastelands. Once these trees mature, the producers will have greater control over production of cocoons.

End-notes

1. Based on information provided by Satyabrata Acharya, Programme Director, Jharkhand, PRADAN

2. Based on information provided by Mr. Khitish Pandya, CEO, Eco Tasar Silk Pvt. Ltd.

3 Creating Inclusive Poultry Value Chains: The Kesla Cooperative Model[1]

Introduction

PRADAN is a public service organization that promotes rural livelihoods in the poverty stricken region of central India[2] – home to the largest concentration of global poor.[3] PRADAN focuses its attention on three main areas, namely, creation and enhancement of livelihoods, the integrated development of natural resources, and rural enterprises.

This case describes PRADAN's intervention to enhance income from backyard poultry in Kesla block. Efforts initiated in 1992 have led to the establishment of a model for small holder broiler farming, which is being replicated in other states such as Jharkhand, Chhattisgarh and Orissa. By April 2008, PRADAN was working with 5,306 women broiler-farmers, organized into 15 cooperatives, and one producers' company, with a collective turnover of about Rs 400 million. This is the largest conglomeration of small-holder poultry farmers in India.

Background and Context of Intervention

Profile of the area

Kesla is a tribal block in the otherwise prosperous district of Hoshangabad in Madhya Pradesh. About 44% of the population of Kesla are tribal and 13% are scheduled castes. The poultry project is concentrated in the southern part of the block, where nearly 80% of the population is tribal. Typically, a tribal family in the area earns about Rs 15,000–18,000 per year, one-third of which comes from rainfed agriculture with low productivity, another third from the collection of minor forest produce, and the rest from wage earnings. Most of the budgets of the target households are in deficit; hence, they tend to reduce consumption, and forward sell the expected produce from agriculture and forests.

Home-based Fowl Rearing in Kesla

Rearing of country fowl is popular among poor households. A household typically keeps ten to fifteen fowls, which survive mainly by scavenging on household waste. This activity — backyard country fowl rearing — uses very little of family resources,

labour or cash, and provides Rs 1,200–1,800 of income in a good year, mainly meeting requirements for emergency cash. In addition, the family gets some eggs for consumption. The activity also has social value. Poultry is reared for festive occasions, ceremonial purposes, celebration, and as game. Chicken is regarded as a special delicacy with which one may honour one's guests.

Usually, the women in the household take care of the flock. The tribal households make no efforts to improve the quality of the breed or the flock. Stockbreeding is left to chance; no selective breeding is practised. Inbreeding is common, leading to diminished performance. Veterinary advice is generally not available. Indigenous medicines are sometimes used for known diseases and injury. Less than 5% of the households have built dedicated pens for their flock; usually the flock shares the owner's home.

Birds attain the weight of 800-900 gm in six to seven months. The birds, on an average, lay 30 to 50 eggs a year in three batches of 10 to 20 eggs each. Though hatchability is high at around 70-80%, the rate of chick mortality is high too at 40-60%. Survival rates across ages are low. During summer, due to disease outbreaks, the death rate is high; it is not uncommon for the entire flocks to be completely wiped out if a disease breaks out.

Poultry (broiler) industry in India

With India's economy rapidly expanding, growth in the broiler sub-sector is marked by a rising demand for animal protein. Poultry industry has been growing at the rate of 12% annually over the last decade. At present, the annual national consumption is 2.2 million tonnes. A CII-McKinsey report on the sector predicts that the demand for broilers will increase to 10 billion by 2015. The per capita annual chicken consumption in India is 850 gm, and in rural areas it is 350 gm against the world average of 9.5 kg. This shows that there is considerable scope for future growth.

Chicken is the first-choice meat for the non-vegetarian population because of its wide culinary adaptability to various Indian cuisines. On health grounds chicken being white meat is preferred over goat and lamb. Further, on religioous grounds chicken is acceptable to both Hindus and Muslims.

The opportunity to achieve a double-digit annual growth rate in poultry industry has essentially been cornered by the large growers, and the lot of the small farms has been worsening. The latter's share in the total marketed production has dwindled from 55% in 1970 to less than 10% today. This process of concentration of production in the hands of big producers has also been aided by the failure of small growers to negotiate with the organized poultry industry, which is increasingly becoming market-oriented and vertically integrated.

Home-Based Broiler Farming Intervention

Key Elements of the Model

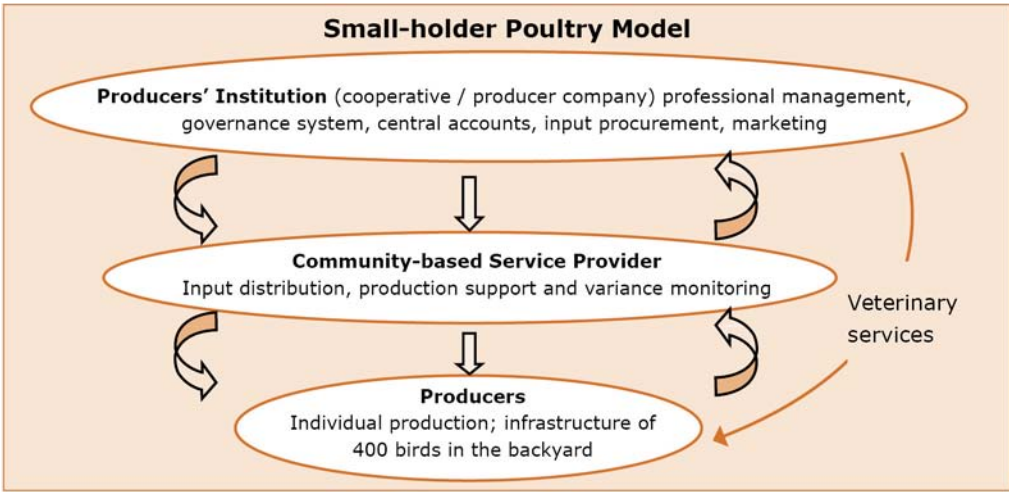
The home-based broiler poultry model, described in the following section, has demonstrated that it is possible for small farmers to participate in this growing industry. They have been able to match the efficiency of big farmers and organized integrators. Today, these producers constitute the largest commercial production houses in Madhya Pradesh and Jharkhand.

The small-holder broiler value chain attempts to adapt complex production technology to the small farmer's context and, at the same time, achieve economies of scale through the collective procurement of inputs and marketing of produce. The essential elements of the model are:

- Decentralized production infrastructure with 300-400 birds in the homestead backyard, which fits into the daily life of the tribal woman.
- Production efficiency with rigorous training of producers, intensive production support and on-call referral veterinary services of high quality.
- Cost effectiveness with collective procurement of inputs and sale of birds to achieve economies of scale, and backward-forward integration.
- Creation of a system to address the volatile nature of the market by de-linking production efficiency from enterprise efficiency, and collectivization of operations when dealing with markets.
- Customized financial and MIS software for decentralized operations.
- Charges of para-vets linked to production parameters.

As shown in Figure 1, the model comprises decentralized rearing of birds by primary producers at the village level, who are supported by their collective institution for a variety of services. These services are delivered either directly (for example, veterinary)

Figure 1: Elements of the Home-based Broiler Poultry Farming Model



or through service providers[4] (for example, input supply and knowledge services) trained by PRADAN. The collective institution is manned by trained professionals and governed by people's representatives. The institution monitors the performance of primary producers through its service providers.

Functioning of a typical producers' institution

All women producers are members of the cooperative/producers' company. Producers organize themselves into clusters, and select a representative for the Board of Directors. The Board of Directors meets once a month. In this meeting, all important issues such as input and output prices, performance of different clusters, new appointments, remuneration and performance of staff are discussed, and decisions are taken.

In the monthly Board meeting, the CEO, who is responsible for day-to-day management and operational decisions, reports on the business performance of the cooperative. The CEO is supported by community-based supervisors for the provision of farm services, and production management. The supervisors are paid according to their output. The Annual General Meeting (AGM) is convened to discuss issues such as distribution of surplus, etc. The auditor's report is circulated in advance, and is approved in the AGM.

Evolution of the Small-holder Broiler Farming Model

The model described above has evolved over two decades of experimentation and intervention; it has taken place through four stages.

Phase I: Experimentation (1988–1992)

The experimentation stage began in 1988 with trials of improved breeds of cockerels, and superior dual-purpose birds. However, such breeds were not suitable for the small-holder because the production cycle was too long, the market was limited, and the capacity of the family to produce them on household waste was also limited. It was soon realized that if money had to be spent on providing shelter and feed to the birds, perhaps it would be better to choose the best breeds with high feed conversion ratio, short production cycle, and good market value.

Phase II: Pilot testing and demonstration of broiler farming (1992–1997)

This phase was spent in learning the intricacies of raising broilers because this required a sophisticated and technology-intensive production process. Getting an understanding of the markets, including the entire value chain, was considered crucial for success. For example, in the initial years, some farmers started specializing in brooding (a critical part of production), and supplying the chicks to other farmers. This process was decentralized after it was discovered that brooders did not have a stake in producing quality chicks because there were no verifiable indicators for quality. Further, much time was spent on learning how to contain diseases. Ranikhet was a major killer during those days.

Phase III: Scaling up (1997–2002)

The poultry industry is highly volatile; hence, it is critical to de-link the risks of production from those of the enterprise. If this were not done, producers with better market information would gain, and others would lose even their working capital. In 1998, the cooperative evolved a system of fixed prices, in consultation with producers, which made it possible to de-link the risks of producers from those of the enterprise. The idea was also applied to inputs because their prices also tended to vary along with the market price of ready birds. This aspect of the Kesla model has sustained primary producers even during recurring market shocks on account of bird-flu scare in the past five years.

Phase IV: Prototype development and replication (2002 to Date)

Creating a market for broilers was the first big hurdle. The cooperative soon realized that the production volumes and the transaction costs to reach Bhopal market made exploitation of that market an unviable proposition. The local ‘table meat market’ was essentially for goat meat, which was sold fresh, cut into pieces of required quantities. The chicken sold was mostly country fowl, which was sold by numbers, and not by

weight. It took two years to establish broiler as an alternative meat product sold by weight in this market. The growth of Kesla Poultry is closely linked to the growth of chicken market in Sarni-Pathakheda. This is a coal-mining area about 60 km from Kesla, which has a large worker population with high disposable incomes. Till 2000, almost two-thirds of the produce of the cooperative was sold in this market. Even today, the cooperative sells only 10-15% of its total produce in Bhopal; it sells the rest in local markets within a radius of 60 km.

In 1992, 2,500 table birds were traded per month in the area. By 2005, this area became the third largest broiler cluster in Madhya Pradesh, producing over 2,00,000 table birds every month. The demonstration of broiler farming with the tribal poor has had a multiplier effect. With the easy availability of poultry feed stores, vaccines and delivery of chicks at the farm, the job of rearing broiler birds has become much easier. Other large farmers have also found it expedient to set up broiler farms as more bird traders come to the area. Organizing the supply of quality inputs at competitive prices with little production was another challenge that took many years to address. In 2004, PRADAN initiated the small-holder poultry in Jharkhand. Basic inputs such as feed and medicines were just not available even in the state capital, Ranchi. Producers had to compromise on the quality of inputs. Moreover, it was common to find producers using expired vaccines and spurious medicine of unknown brands. Systematically, the producer collective started negotiating with manufacturers in Kolkata, and given the increasing size of operations, a few showed interest, and started dealing directly with the cooperatives. The cost of inputs has now drastically reduced due to collective procurement through the Jharkhand Poultry Federation.

Economic Viability

Value Chain Analysis

In this section we provide a comparative analysis of three systems of poultry (broiler) production and supply:

a) Country fowl supply chain

b) Industrial broiler value chain

c) Home based cooperative value chain

Tables 1, 2 and 3 provide a comparison of the margin analysis for the three systems. The profitability as well as strengths and weaknesses of each are discussed below.

Country fowl value chain

The starting point of the supply-chain is the production of birds in the farmer's backyard. The total cost of rearing a marketable bird is estimated at Rs 20 per bird.[6] The first transaction takes place in the household when brokers pick up birds from households, and take them to the local market – nearby *haat* or *kasba*, where primary bulking takes place. Traders from cities visit local markets to settle on birds for retailing. Transaction costs include haulage losses and maintenance costs at different points. A distinctive feature of the chain is scarcity of supply in a small, niche market. In the terminal market in urban areas, sale of these birds constitute a small portion of the retailers' business. The return per bird to the farmer is high, and the farmer's share in the supply chain is highest at 63%. However, the annual return for a family maintaining only 10–15 birds is Rs 1,200–1,800, representing only about 10-12% of the annual income.

Industrial broiler value chain

This takes into account the large private poultry farmers, with a production capacity of 5,000–10,000 birds/cycle, who source the inputs from the market, and supply birds in the wet market. A recent phenomenon of the poultry industry is the emergence of 'integrator'. An integrator is a large corporate entity such as the HV Group, Suguna, or Godrej, which operates at all the value chain nodes, coordinating the business vertically. The total production in India, as on 2007, in the hands of integrators is about 15%. In most of the areas, where small-holder poultry model has been introduced, presence of integrators is minimal.

Small-holder cooperative value chain

The small-holder value chain introduced in Kesla is more efficient than the industrial poultry value chain. Thus, it is able to stay competitive. The main reasons are as follows:

i. The farmer gets inputs, such as poultry feed, day-old chicks and veterinary services, provided at her doorstep, and is thus .free from the resource constraints of the typical small farmer. The unit size is also designed to allow the family to deploy its surplus labour optimally.

Table 1: Country Fowl Supply Chain

Transaction Points	Cost of Production /Buying (Rs)	Selling Price (Rs)	Gross Margin (Rs)	Transaction Costs (Rs)	Net Margin (Rs)	% Return	% of Terminal Market Price	% Net Margin of Total Margin	Actors
Production End	20	60	40	0	40	200%	60%	63%	Individual Households
↓									
Brokering Point	60	70	10	5	5	8%	70%	8%	Brokers
↓									
Primary Market/Bulking	70	85	15	5	10	14%	85%	16%	Local Village Haats
↓									
Terminal Market	85	100	15	7	8	9%	100%	13%	Traders

 # Prices are illustrative, male birds are costlier by Rs 10–15.

Table 2: Industrial Broiler Value Chain

Transaction Points	Cost of Production (Rs)	Selling Price (Rs)	Gross Margin (Rs)	Transaction Costs (Rs)	Net Margin (Rs)	% Return on Investment	% of Terminal Market Price	% Net Margin of Total Margin	Actors
Production End	35.5	38	2.5	0	2.5	7%	76%	33%	Entrepreneur
↓									
Wholesaling	38	40	2	1.5	0.5	1%	80%	7%	Traders
↓									
Distribution	40	43	3	1.5	1.5	4%	86%	20%	Traders
↓									
Terminal Market	43	50	7	4	3	7%	100%	40%	Traders

Table 3: Small-holder SCooperative Value Chain

Transaction Points	Cost of Production /Buying (Rs)	Selling Price (Rs)	Gross Margin (Rs)	Transaction Costs (Rs)	Net Margin (Rs)	% Return	% of Terminal Market Price	% Net Margin of Total Margin	Actors
Production End	34	38	4	0	4	12%	76%	44%	Individual Households
↓									
Primary Bulking	38	40	2	1	1	3%	80%	11%	Cooperative
↓									
Wholesaling	40	43	3	2	1	3%	86%	11%	Traders
↓									
Terminal Market	43	50	7	4	3	7%	100%	33%	Traders

ii. The production system builds on low (or no) cost slack labour available in rural households. Thus, compared to the large farmer in peri-urban areas, the margin is almost 60% higher.

iii. The aggregation of produce to create marketable lots is done by the poultry cooperative. The increased cost of collectivization, and providing veterinary and management support to farmers is offset by the market outreach directly to retailers, thus doing away with distributors. Most of the cooperative's market is in the hinterland — dispersed small rural markets, requiring wholesalers to service retailers directly at their shop.

The proportion of a farmer's margin with respect to the total margin in the chain at the production end is about 44%, lower than that of the country fowl supply chain which is 63%. However, the critical point is the absolute income in the hands of the farmer. the annual income in the case of home-based broiler farming is much higher at about Rs 13,000–18,000.

A comparison of the three value chains brings out how the home-based cooperative broiler value chain becomes efficient by bringing functions in-house (Table 4). The home-based broiler value chain is, at its core, a scaled-down version of modern industrial broiler value chain. The farmer-centric character of the value chain is the key to its success because at the lower unit size, the return per unit has to be higher than the industrial broiler chain. The small-holder value chain introduced in Kesla increases the margin farmers receive by eliminating intermediate actors. The proportion of the farmer's margin with respect to the total margin in the chain in this model is about one-third less than that of the indigenous value chain; however, the key variable to note is the low-carrying capacity of the indigenous value chain, giving the farmer low absolute returns.

Economic Impacts of the Kesla Cooperative

Economics at the farmer's level

A woman poultry farmer requires only one cent of land (435 sq ft) for her trade; she may own it or take it on a lease. She earns between Rs 13,000-18,000 a year, which works out to Rs 65-90 a day, for approximately 200 days of engagement in the activity per year. This income, available to her in a regular stream of cash flow, helps her to meet her expenses and contributes to capital formation. The financial details of an individual farmer in the value chain are given in Table 5.

Table 4: Comparison of cooperative value chain with existing supply/ value chains

Particulars	Country fowl supply chain	Industrial broiler value chain	Cooperative value chain
Pre-production features	- Chick is obtained from in-situ hatch of eggs in the household - Birds scavenge	- Chicks are supplied from hatcheries - Feed is bought from private company (compound livestock feed) or prepared in-house	- Chicks are supplied from hatcheries or are of own production - Feed is produced in cooperative's own unit
Production features	- No significant labour deployment required in the family - No access to veterinary/technical services	- Outside labour is employed - Veterinary/technical services from market	- Deployment of family labour - Round the clock veterinary/technical services at the doorstep
Production cycle (in a year)	1.5	5-6	5-6
Feed conversion ratio (kg of feed/kg body weight of bird)	5	1.8	1.65
Mortality rate (%)	30 %	5 %	5 %
Average flock weight (kg)	0.9	1.5	1.5
Efficiency index	60	220	246
Marketing features	Directly picked from farms by procurers or sold in local haats	Involves elaborate chain of wholesalers and distributors for supply to retailers	Direct to retailers, wholesalers, and cooperative-owned retail outlets
Total value chain margin (Rs/kg)	63	7.5	9
Average flock size (birds)	10	5,000	350
Average investment (Rs in'000)	Minimal	1,000	50
Average annual margin (Rs)	1,500	2,00,000	15,000
Primary producer's share in terminal price	60 %	76 %	76 %
Primary producers'[5] share of overall margin	63 %	33 %	44 %
Price assurance mechanism	Price discovery not in the hands of farmers	No mechanism	Pooled across farmers and time. Delinked production and market.

The table shows that a typical broiler farmer can break even in about two years. The woman's participation in the activity has multiple benefits and impacts, which go beyond the mere economic uplift of the household (Box 1 for an illustration).

Table 5: Economics of Individual Broiler Unit

Particulars	Units	Amount
Particulars Birds per cycle/ batch	No.	400
Batches/year	No.	6
Days engagement/year	No.	210
Capital investment	Rs	36,000/-
Working capital	Rs	17,000/-
Margin/batch	Rs	3100/-
Annual margin	Rs	18600/-
Break-even point	Years	2

Phoolwati Bai, a Proud Poultry Farmer of Mandipura

Phoolwati Bai lives in Mandipura Village. Her family comprises her husband and six sons. She is a landless farmer. Prior to starting poultry, her only regular source of income was from loading sand in the local sand mines, earning hardly Rs 10–15 a day. She often migrated to neighbouring areas for wage work during harvesting season. Her husband worked as a wage labourer in Itarsi, 25 km from Mandipura, earning Rs 1,000–1,500 every month. She started poultry farming in 1997. From her first batch, she earned Rs 1,500. She repaired her house taking a loan of Rs 19,000 from her SHG, and successfully repaid it from the profits of the poultry farm. She then took a loan of Rs 30,000 under Prime Ministers's Rojgar Yojana (PMRY),[7] to expand her poultry shed in 2005. She has been regularly repaying the instalments, and is confident of repaying it within a few years. She and her husband have completely stopped wage labour and migration. She is concerned about her children's education and career. One of her sons passed the higher secondary examination with a first division and is now employed. She has also invested in two LIC policies and deposits a premium of Rs 883 twice a year. In 2007–08, Phoolwati Bai earned Rs 38,000 net income from the broiler rearing activity.

Economics at the cooperative level

The financial performance of the Kesla cooperative, which was registered in 2001, is discussed in brief. Salient financial parameters for the last four years are shown in Table 6. The annual turnover of the cooperative has doubled in the last three years. The surplus is distributed to members, and only a small portion is kept by the cooperative.

Rs 67.2 lakhs distributed to members in 2007–08 is four times more than the sum distributed in 2004–05. As on 2007–08, its net worth is Rs 33.4 lakhs. In addition, it has created a price-risk mitigation fund of Rs 10 lakhs.

Table 6: Financial Performance of Kesla Cooperative

Particulars	2007-08	2006-07	2005-06	2004-05
No. of members	459	376	354	276
Margin distributed to members (Rs)	67,22,219	40,53,373	26,80,242	19,31,271
Total sales (Rs)	5,84,41,173	3,81,95,184	3,39,17,392	2,70,61,784
Gross profit (Rs)	15,27,175	20,71,622	11,52,429	25,10,402
Profit before non-cash charge (Rs)	3,73,950	3,14,291	2,53,632	2,71,411
Net profit (Rs)	2,47,850	1,10,000	(60,078)	45,623

The year 2005-06 was an exceptionally bad year for the industry, with bird flu scare keeping ready bird prices depressed for four months. The farmers' margins dropped as they contributed their income from one batch to keep the cooperative afloat. The cooperative suffered a small loss that year, which was made up in subsequent years.

Conclusion

Over the past two decades, PRADAN has been able to evolve a model of home-based broiler farming by small producers, that has proved both competitive and resilient, generating gainful self-employment, for over 5,000 women farmers. With a few local adaptations, the model, which was originally developed in Kesla, has been replicated successfully in Jharkhand, Orissa, and Chhattisgarh and is poised for further expansion.

In the last few years, the poultry industry has become vertically coordinated, that is, functions from chick production to marketing are increasingly coming under the control of single entities. The vertical integrators operating at all the sector nodes — grandparent stock, commercial chicks, feed, and marketing — have made the industry much more capital intensive and scale sensitive. The current efforts are geared to making small-holder poultry meet the challenge of sectoral consolidation and scale.

The value chain developed helps insulate the families from price fluctuations and supply uncertainties of the market while strengthening the production system through improved market access, better capital management, high-quality production services, and technical hand-holding. The small-holder poultry model has demonstrated that it is possible for the small farmers to participate in this growing industry. They have been

able to match the efficiency of big farmers and organized integrators. Today, these producers constitute the largest commercial production house in MP and Jharkhand.

The cooperatives are further federated into two state-level secondary organizations, namely, Jharkhand Women Poultry Federation and Madhya Pradesh Women Poultry Producers Company. The federations pass on the benefits of vertical integration, professional and technical support, economies of scale, and increased bargaining power with external suppliers and regulators while providing a platform for knowledge and process-sharing between its member cooperatives. They help member cooperatives in, a) reducing input cost for feed (a major component of total expenses), and b) ensuring supply consistency through collective purchase or the creation of in-house production facilities. This helps leverage the strengths of both centralized and decentralized structures.

Plans have been drawn up to launch a national collective with a mandate to protect and promote the interests of small-holder broiler farmers by 2009. The current plans aim at reaching 10,000 farmers by 2012, with a cumulative annual turnover of Rs 400 crores, and generating Rs 35 crores for its member-producers.

End-notes

1. Authored by Anish Kumar, Programme Director, PRADAN

2. PRADAN is registered as a charitable society in the state of Delhi under the Societies Registration Act (Act XXI of 1860). In 2007, PRADAN worked with 1,50,000 families of central India — organizing women into SHGs and assisting families in their livelihood activities.

3. Out of an estimated 280 million poor families in India, close to 65% live in Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, and West Bengal.

4. These are rural youth from the local areas who have been trained by PRADAN staff and who identify strongly with the cooperative movement.

5. Efficiency Index = Average body wt (kg) x Liveability (%) x 100

6. This includes the cost of the egg, family labour spread over 180 days and cost of watch and ward calculated at the rate of Rs 3/hour. The food scavenged by the bird is not included in the cost.

7. A scheme for the self employment of educated youth.

4 Livelihood Promotion Services: BASIX's Intervention in the Milk Sub-sector[1]

Introduction

BASIX adopts a cluster-based, sub-sector approach to livelihood promotion. The basic premise is that the sub-sector approach fosters dynamic growth of the local economy, and generates more income and employment for the rural poor. A large number of rural poor, who are unable to pursue self-employment, can find gainful wage employment if a sub-sector can be developed in the local economy.

The first step in sub-sector development is identification of a sector that has the potential to generate significant increases in income and employment for the rural poor. Logically, if a sub-sector has the potential for development, it presupposes existence of some 'ruling' constraints. To identify such ruling constraints is the next logical step. Evidently, this needs to be followed by the provision of credit, appropriate technical assistance, and support services. Here, two distinguishing features come into play. First, it is unlikely that a single organization will have the resources to provide all the needed assistance. Second, the local economy generally has a good number of players that can provide the much-needed assistance. It, therefore, makes sense to bring about linkages amongst such players to increase economic viability, and then to leverage this relationship so that producers can derive some concrete benefits such as increasing productivity and reducing market risks.

As the process matures, the question of sustainability emerges. This has to be viewed from two perspectives: the service providers, and producers. As a service provider, BASIX cannot sustain its involvement unless its services are paid for. On the other hand, the producers need to build, and leverage their social and political capital as bulwark against political and market changes. A producers' cooperative (in one form or another) would then be a good consideration. There is no ideology involved in this; these are issues of survival and growth.

This case study illustrates how a large number of sustainable livelihoods can be promoted by adopting the sub-sector approach. The study shares BASIX's experience of reviving a value chain in the dairy sub-sector after it had gone sick. The Andhra Pradesh Dairy Development Cooperative Federation (APDDCF) had established milk chilling plants (MCPs) at six locations in Mahbubnagar District in the '80s. By 1997,

three of these had become defunct. BASIX intervened because it saw the potential of reviving the value chain by adopting a sub-sector approach.

Sub-sector Identification

BASIX has identified seven sub-sectors, in which a large number of its customers earn their livelihoods. These are groundnut, cotton, soybean, vegetables, pulses, non-timber forest produce, and dairy. Among these, dairy is the most preferred diversification for marginal producers. India is now the largest producer of milk, and with 10 million producers, it contributes close to 5% of the GDP. Additionally, Operation Flood has created a network of cooperatives all over the country, with some physical infrastructure in over 400 districts.

BASIX works with the landless in the poorer districts with low/erratic rainfall in Andhra Pradesh. Dairy is one of the few livelihoods that the poor, particularly women, are able to practice. Although in the initial years, BASIX's exposure in the dairy sector was minimal, it was fully aware of the potential of this sub-sector.

Conditions such as availability of infrastructure, including power, roads, milk chilling plants, etc., were considered. The rural poor, particularly women, practised dairy farming, in spite of facing resource and service constraints, because it was one of the few sources of augmenting their family income. And though the number and quality of cattle were not very high, it was reasonable enough. Moreover, BASIX could make significant contribution in the availability of capital (credit).

Regarding demand conditions, the size of the domestic/local market was good. There were quite a number of buyers such as APDDCF, Heritage, Dodla, Britannia, and Superday. The growth rate of domestic demand was excellent, and there was significant presence of external buyers. Regarding the size and structure of firms, although the existing picture was gloomy, the possibilities of setting up new firms or refurbishing existing ones were encouraging. Finally, while the assessment of related and supporting industries was not encouraging, a number of government-supported training schemes and support facilities such as *Gopal Mitra*[2] were available.

To BASIX, the conditions of the dairy sub-sector in Andhra Pradesh, therefore, met two of the most important criteria of Porter's Framework. Porter found that while all determinants were mutually reinforcing, advantages most critical for success were in, (a) existence of a large and discerning local market, and (b) existence of a large number of firms with intense competitive rivalry among them. (However, the state government's intention of selling off MCPs to private players as a part of privatization could actually reduce competition, thereby adversely affecting the sub-sector.)

BASIX concluded that the dairy sub-sector could be developed to foster the growth of the local economy, and generate income and employment. The results would be more encouraging if some of the ruling constraints could be addressed.

Identifying Ruling Constraints

However, BASIX was advised not to lend for dairy activity for three major reasons: the poor experience of the Amul cooperatives, similar bad experience with IRDP, and the poor functioning of MCPs. For example, three of the six MCPs established by APDDCF in Mahbubnagar were defunct by 1997. The MCP of the APDDCF at Wanaparthy, which had a capacity of 10,000 litres per day (lpd), with a breakeven of 6,000 lpd, had actually procured 270 lpd of milk in the lean season and 4,000 lpd during the flush season, averaging just 1,290 lpd. The plant was running at a loss because of the high operating costs and overheads, and APDDCF was contemplating closing it down.

There was no dearth of milk production nor was there poor demand to explain the low procurement of Wanaparthy MCP. The reason was pure mismanagement; otherwise, the situation would not have changed significantly in just one year in 1998, with the posting of a dynamic new Manager to Wanaparthy MCP. However, though poor management and absence of leadership in a key facility were organizational issues, and these needed to be solved, they did not amount to ruling constraints. Normally, ruling constraints refer to absence of facilitating mechanisms, or presence of inhibiting environmental factors in the value chain process that adversely affect the economic viability of the enterprise. For example, if credit is essential but not readily available due to banks' limited outreach and cumbersome lending procedure on the one hand, and absence of alternative micro-finance lending agency on the other, lack of credit can be considered a ruling constraint. Similarly, if rural producers de-emphasize dairy as a viable livelihood option because it takes too long for milk to reach adjoining towns, the milk-route and chilling facilities become ruling constraints.

Analysis of the working of the APDDCF and the MCPs, however, do indicate the presence of ruling constraints in the dairy sector. The APDDCF has a network of milk producers' cooperative societies (MPCS) and MCPs, where milk is brought, chilled, and pasteurized before transportation to distant major cities such as Hyderabad for further processing, packaging, and distribution. A number of MCPs in the dryland districts where BASIX works were nearly defunct because the milk collection was low, and the MCPs, therefore, stopped collecting from non-remunerative milk routes. This led to uncertainty of milk marketing for dairy farmers and the break-up of the dairy cooperatives.

Of the six MCPs in Mahabubnagar, the three closest to the city of Hyderabad were

functioning well; the three farthest were defunct. Tankers brought the milk from MCPs to Hyderabad for processing by APDCCF. No local sales were made. Milk for local consumption came from Hyderabad in pouches. The MCP in Wanaparthy was supposed to collect milk from 16 village cooperatives. But this plant never ran at more than 30% capacity. In 1997, its collection was below 500 litres/day. The plant was running at a loss due to high operating costs and overheads. As a result, APDDCF wanted to close down the MCP. Four key factors contributed to the Wanaparthy plant's impending closure:

- *Limited milk collection:* Milk collection was limited and uncertain. Only two milk routes were in operation; no milk producer co-operative societies had been organized, and village producers did not know if milk collection would continue at existing centres.
- *Lack of production incentives*: Villagers had no production incentive. The milk collection centres did not conduct fat tests on the milk, resulting in a low procurement price and no incentive for quality.
- *Limited product knowledge:* Limited extension activity resulted in improper vaccination, outbreak of diseases among livestock, poor feeding practices, and improper care during animal pregnancy. Inputs supplied reached only the influential farmers.
- *Limited availability of credit:* Most credit provided under government-sponsored schemes reached only a few producers in each village, was not timely, took too long to obtain, had high transaction costs, and was misused by borrowers. Bank credit was negligible, with the exception of government-sponsored borrowers.

When a new manager was posted at the Wanaparthy MCP, he took steps to address the first three factors. The MCP staff began visiting each milk collection centre, and educated the producers about the benefits of forming cooperative societies. As a result, nine new producers' cooperatives were formed. The MCP staff also explained to the producers that they could make more money by supplying milk with higher fat content than by adding water. New services were also added. Artificial insemination (AI) was introduced at the doorstep of the producer by taking advantage of *Gopal Mitras*. Women extension workers were also asked to talk to the women who took care of the cattle. Two new milk routes were introduced. By early 1999, all these measures began to yield results in terms of the quantity and the quality of milk procured.

- *Quantity*: The average procurement increased from 1,292 lpd to 2,526 lpd, representing a 95% increase.
- *Quality:*
    - Fat content: Increased from 6.1% to 7.3%
    - SNF: Increased from 8.5% to 8.6%
    - Milk spoilage: Decreased from 0.05% to 0.01%

Although procurement nearly doubled to 2,500 lpd, it was still too low to ensure the break-even of the chilling plant. To increase procurement further, productive cattle population had to be increased. For this, dairy farmers needed loans but bank procedures were unfriendly. It was at this stage that BASIX decided to intervene in Wanaparthy. For BASIX, this was to be a pilot intervention before it could scale up operations in the dairy sub-sector.

The Pilot Project

In April 1999, BASIX tied up with the Wanaparthy MCP to provide credit to producers (Table 1). Under the arrangement, the MCP would recommend potential borrowers, and BASIX would provide loans after proper appraisal. The MCP also agreed to deduct loan installments on behalf of BASIX before making payments to the milk producers, and provide technical assistance and support services (TASS), and extension services to farmers getting loans.

Table 1: BASIX Credit Programme in Wanaparthy Area

BASIX Credit Programme in Wanaparthy Area in 1999–2000	
No. of milk cooperatives	15
No. of farmers	> 500
Loan amount	> Rs 60 lakhs
No. of buffaloes purchased	700
No. of buffaloes purchased through loan	600

The relationship was not limited to lending. Besides plugging the credit gap, BASIX helped Wanaparthy MCP in the following ways:

- Identifying areas for improving collection efficiency after conducting detailed study.
- Purchasing electronic weighing machines and electronic Milk-o-Testers for quick fat testing.
- Helping the MCP to get its accounts and payments system computerized.
- Introducing MCP to a Hyderabad company to develop software to integrate all

the three electronic systems.

- Tying up with New India Assurance and private insurance companies for insurance of animals. This was to overcome the limitations of a government-supported insurance package, covering the animal, the cattle shed (usually made of thatch and prone to fires), and the dairy farmer's life, under the *Gopal Raksha* policy. The government scheme covered only a limited number of borrowers; later, BASIX persuaded the borrowers to seek insurance from private insurance companies for their cattle.
- Initiating the local sale of chilled, loose (non-packaged) pure milk, using 100 litre micro-coolers at retail shops in small towns for the first time in November 2000.
- Installing a local milk-pouch packaging machine. Pouched milk was sold locally whereas, earlier, consumers had to depend either on milk vendors prone to adding water to milk, or on expensive pouched milk transported all the way from Hyderabad.

Outcomes and Impacts

The following is a summary of the results of the interventions:

- √ The average milk procurement increased from 1,300 lpd to 6,400 lpd between 1999 and 2000. Procurement crossed 10,000 lpd in October 2000.
- √ Improvement in milk collection efficiency. This meant that producers no longer needed to wait in long queues for hours, thereby releasing them for other productive activities.
- √ Easy checking of the fat content of the milk, thereby facilitating immediate technical assistance to weak cooperatives.
- √ Improvement in measurement, leading to decreased milk wastage and increased producer income. On an average, the producer saved nearly 20 ml/litre and MPC saved 9 ml/litre.
- √ Transparency in accounts, resulting in the producer being able to know the amount due to her for any given time period.
- √ Decrease in transport cost from Rs 1.12 to. 0.26 per litre and increase in the milk handled per employee from 126 lpd to 580 lpd.

The impact on livelihoods is even more significant. The sale of milk from villages in the area went up from below Rs 5.0 million to over Rs 24 million per year. Moreover, the net profit of milk producers went up by Rs 4 million per annum, or Rs 5,700 per household, a significant increase, considering that the annual family income of a BPL family of five is below Rs 25,000.

All parties benefited by participating in the intervention. Producers benefited by getting an assured market for milk at their doorstep and at a higher price than from collection agents. The APDDCF benefited by reviving its chilling plant, and also marketing more milk through its processing plant and marketing network. BASIX benefited in two ways. First, the increased income of the producers resulted in additional requests for loans. The improved livelihood of existing producers motivated new producers, increasing the demand for loans. Second, the risk of default in loan repayment was reduced by the repayment structure instituted at the Wanaparthy MCP. The MCPs automatically deducted loan installments before making payments to the village producers for their product.

It is also instructive to note the differential as well cumulative impact of TASS and credit on livelihood promotion.

Table 2: Cumulative Impact of TASS (T) and Credit (C) on Milk Production

Year	Average Annual Milk Production
1997	1,260 lpd (No T & C)
1998	2,526 lpd (T only)
1999	4,537 lpd (T & C)
2000	5,800 lpd (T & C)
2001	6,400 lpd (T & C)

Table 3: Differential Impact of TASS (T) and Credit (C) on Milk Procurement

Treatment	Increase in milk procurement
No TASS, no Credit	30%
No TASS, only Credit	34%
Only TASS, no Credit	117%
Both TASS and Credit	183%

Four lessons emerge from Tables 2 and 3, at least so far as sub-sector development of milk is concerned.

1. Credit alone does not have as much impact, in terms of increased milk supply, as do credit plus TASS.
2. As stand-alone facilities, TASS yields better returns than credit.
3. The credit agency itself does not have to provide TASS support.
4. It makes sense to collaborate with sub-sectoral agencies such as APDDCF and energize them with credit support to their producers.

Scaling Up

Based on the success of the Wanaparthy intervention, BASIX made a presentation to the Managing Director of APDDCF in late 2000. Impressed by the turnaround of the MCP, he invited BASIX to replicate the intervention in other dryland districts where MCPs were working well below capacity. By July 2001, BASIX was working with over a dozen APDDCF chilling plants in Anantapur, Cuddapah, Kurnool, Mahabubnagar, Nizamabad, Medak, Adilabad, and Srikakulam Districts.

In Bichkonda in Nizamabad District, BASIX leveraged its relationship with GRAM to rejuvenate the Mutually Aided Cooperative and Thrift Society (MACTS) for lending purposes as well as to revive the defunct bulk-cooling unit (BCU). However, the overwhelming preoccupation of some managers with the revival of the BCUs in Nizamabad District led BASIX to re-assert that the main objective was to enhance the dairy-based livelihoods of the poor in the four backward mandals in a sustainable way.

The total credit extended to the dairy sector since the period April 1999–March 2000 was Rs 22 million, up from Rs 5 million. The numbers really spiralled after that. From April 1999 to Sept 2002, BASIX lent over Rs 145 million to 13,242 milk producers in Andhra Pradesh.

Establishing Cooperatives of Producers' Organizations

From a purely functional point of view, dairy cooperative unions have been usually beset with two sets of problems. The first set relates to their failure in covering marketing risks that member-producers face, with regard to the inability to access working capital, closure of milk routes, and uncertain collection and payment schedules. Therefore, one of the major concerns of Bichkonda MACTS that BASIX attempted to resolve was to link MACTS to financial institutions through the help of GRAM.

The second set of problems the dairy cooperative unions face is with regard to discharging managerial tasks. These are often tardy in ensuring that technical assistance reaches members on time. Enforcing discipline within its own ranks is another problematic area. BASIX recognized that, in some areas, unions need reorganization. The Karimnagar Milk Union was, therefore, reorganized.

Strategizing to Deal with Market Risks

In today's scenario, with constant shifts in policies and markets, any sub-sector is likely to face risks. Therefore, every player has to be ever alert to emerging challenges, which need to be met halfway, otherwise organizations are likely to be swamped by the forces of change. In short, preemptive strategizing is the answer.

Nothing illustrates this better than an internal note circulated by the MD of BASIX to his colleagues in October 2002.

> *The first risk is that APDDCF is likely to be sold off by the GoAP. If that happens, we cannot be sure how many of the milk chilling plants that we are working with will be continued by the new owners. The chances are that many of the marginal plants, which are collecting below 5,000 litres per day, will most likely be dropped from the procurement network. This means many of the dairy farmers we have lent to will not have any steady marketing outlets. Of course, they can still sell locally but it would put them at a disadvantage.*
>
> *The second risk is more long term — likely to become effective in 2004, when WTO-led imports of milk and milk products become substantial. New Zealand and Australia are in a position to send milk to Chennai and Vizag at a landed cost of Rs 8 per litre, which means Rs 10–11 per litre in a pouch. Milk sells between Rs 12-14 per litre in pouches. This will make domestic milk uncompetitive, at least in the metros. (Those who find this surprising or unbelievable should think of what happened to edible oils just a few years ago.)*
>
> *In terms of risk mitigation for us, the first strategy should be to identify a range of small and medium private sector milk producers such as Jersey, Vasavi, Cream Line, etc. We need to persuade them to buy milk from the areas we have lent in, and preferably even buy up the chilling plants.*
>
> *The second strategy should be to get as many bulk coolers of 1,000–2,000 litres capacity installed in our operating areas, using DRDA, SGSY infrastructure funds and DPIP CIF funds. A good beginning has already been made in Mahabubnagar (six bulk coolers), Adilabad (6) and in Anantapur (16). The advantage of bulk coolers is that we can have the milk sold locally without pasteurizing and pouching, sending only the surplus to a larger plant for processing. The cost of transporting liquid milk from major ports is high and thus unpackaged milk sold from bulk coolers at Rs 10–11 per litre will be able to compete with the imported milk.*
>
> *The third strategy has to do with the relative cost of transportation of milk vs. milk products. One truckload of liquid milk is worth only Rs 1 lakh whereas one truckload of butter/cheese/skimmed milk products is between Rs 20–50 lakhs. Thus imported liquid milk is unlikely to be competitive except in port cities and metros. Thus, the market is going to change to a situation where only domestic, low-fat milk is competitive whereas milk products are imported. This means we need to shift more towards cow milk, which is low fat, and reduce buffalo milk production. This has implications for our future financing strategy for dairy.*

Ground reality has at least vindicated the worthiness of the second strategy, albeit with a certain amount of fine-tuning. This is illustrated by the installation of bulk coolers in Nagar Kurnool town. The District Rural Development Agency (DRDA) sanctioned funds for installing bulk coolers. APDDCF installed a bulk cooler at Nagar Kurnool town, and started milk procurement in villages whereas BASIX extended credit for the purchase of animals.

Animals were sourced from coastal districts in a unique way of price bargaining. The buyer would check milk yield for a week before paying for the animal. APDDCF, in turn, arranged for veterinary care and training for the cattle rearers. However, it soon had to effect changes in its procurement and sales system. This is because a large number of 'vendors' used to buy milk from farmers, mix water in the milk, and sell it in Nagar Kurnool town. They earned more than Rs 100 a day. APDDCF was not able to procure more than 150 litres per day due to vendor practices. It then hit upon a most novel idea to neutralize such malpractice. Vendors were persuaded to become milk sellers, using APDDCF-issued micro-coolers. In the process, the vendors earn the same but with much less labour. Consequently, the total procurement went up from 150 lpd to 2,500 lpd, and the producers got steady income. Bulk coolers have also been installed in other locations. With DRDA funding, APDDCF installed two more bulk coolers at Gadwal and Narayanpet. Due to additional bulk coolers, the total procurement in Wanaparthy during the flush season reached 16,000 lpd, with 13,000 lpd being supplied to Hyderabad and the balance being sold locally. APDDCF was to earn a profit of Rs 45 lakhs.

Conclusion

Intervention by BASIX in the dairy sub-sector has had significant impact on the livelihoods of the poor. The sale of milk from the area has gone up by about 10 times, from less than Rs 5 million to over Rs 45 million in a span of three years. The successful experience is being replicated elsewhere. The success, however, carries a risk for practising managers. Managers may remember what was done and how, but they may not be fully aware of the logic or the strategic shifts involved. Considering that only a few attempts are made in sub-sector development, and fewer still are successful, practising managers may find it profitable to internalize the general frame of sub-sector development.

End-notes

*1. Edited and shortened version of the case by Somnath Ghosh published in BASIX's **A Resource Book on Livelihood Promotion** Edt. Sankar Datta, Vijay Mahajan and Gitali Thakur. (second reprint edition, 2005), with permission from **The Livelihood School**, BASIX.*

2. Gopal Mitra - a trained village youth in Andhra Pradesh provides AI services at the door step of farmers on custom charge basis.

5 Rangsutra: Adding Colour to the Lives of Indian Artisans[1]

Introduction

Rangsutra is an enterprise that seeks to bring together poor artisans in the handloom and textile industry, the ethnic-fashion conscious customers, and different members of the supply chain, who perform different functions. Its mission is to ensure sustainable livelihoods for artisans and farmers, by creating top quality handmade products, based on the principles of fair trade and a celebration of India's rich craft heritage. Started by a young social entrepreneur, Sumita Ghose, the company has its origins in a group of NGOs working for the uplift of poor artisans in Rajasthan.

Rangsutra has two organizations —The first is a *private limited company* set up in collaboration with FabIndia and Aavishkaar, which takes care of the commercial aspect of the business. The second is a *producer's company*, which organizes the artisans and builds their capacity to handle new products and designs, imbibe new technology , and produce larger volumes at lower costs.

Rangsutra's marketing partner, FabIndia, which controls 30% of Rangsutra's equity, is a large retail store engaged in the sale of fashion garments. The company is on a high growth trajectory, and this has rubbed off on Rangsutra as well. During its first year (2006), Rangsutra's private limited company registered sales of Rs 3 million. For 2007 FabIndia had set an ambitious target of Rs 30 million, but Rangsutra's sales closed at Rs 15 million. Nevertheless, it represented a five-fold growth over the previous year. The target for 2010 has been fixed at Rs 40 million, which it is confident of achieving.

Genesis of Rangsutra

Sumita had worked for a decade with the artisans of the URMUL group of NGOs between 1986 and 1996. With a good idea of the market, she continued helping them informally to find newer markets, and organized exhibitions for them in Delhi. Not satisfied with the occasional exhibition as an outlet for their products, they were seized with the idea of locating a shop in Delhi in order to have direct access to the customers. On her part, Sumita was interested in helping bridge the gap between artisans and customers because she knew that the former were getting poor returns for their labour. She also had a personal interest in handlooms and knew that the market was growing

fast. Hence, the artisans were involved with the enterprise right from the beginning, and getting them a better deal continues to remain the main source of motivation for its promoter.

At this stage, well-known leaders in rural development such as Vijay Mahajan and Dr Amrita Patel got her interested in the idea of starting a producer company. A paid-up capital of Rs 1 lakh was needed to register the company. Ten producers, representing five artisan groups from different regions, contributed Rs 10,000 each, in order to raise the necessary capital, and a producer company called *Rangsutra Crafts Duniya Producer Company* was registered in December 2004. The five artisan groups included three Uttari Rajasthan Milk Union Ltd. (URMUL) organizations, one supported by Grassroots from Uttarakhand, and one supported by Action North-east Trust (ANT) from Assam. The Board included members from artisan's groups, NGOs, and others extending support on the marketing and design aspects.

The newly formed organization began by organizing exhibitions. The products also started selling through FabIndia. Although the products sold well, the company needed to widen its range, for which it needed money to engage professional designers. The biggest challenge faced by the company, however, was generating adequate funds. Rangsutra approached the State Bank of India for a loan but found that it was eligible for a loan of only Rs 0.4 million, since it did not have any assets to mortgage. The company then collaborated with a donor agency. However, after spending Rs. 0.6 million on a market survey, the latter backed out of the partnership because it was reluctant to get into what seemed mainstream business with a profit motive.

Finally, in early 2007, the big break came in the form of an offer from FabIndia, which was developing back-end supply region companies (SRCs) to fuel its growth. As part of the deal, Artisans Micro Finance Pvt. Ltd (AMFPL), a wholly owned subsidiary of FabIndia, agreed to put in 49% of the investment, facilitate bank loans, and enter a buy-back arrangement with the SRC. Another private entity, Aavishkaar (a social venture fund), decided to chip in with 21% paid-up capital. The artisans were to have a share of 26%. Sumita grabbed the opportunity and, in March 2007, a new private company named *Rangsutra Crafts India Pvt. Ltd.* was incorporated with a total authorized capital

of Rs 50 lakhs. The artisans put in Rs 11.6 lakhs, which were contributed by different URMUL organizations on their behalf. Sumita personally took a loan and invested Rs 10 lakhs in the company. She planned to pay back the loan with money earned through consultancy. Table 1 shows the break-up of the actual paid-up capital, and the corresponding share of different shareholders.

Table 1: Break-up of the Paid-up Capital in Rangsutra's Private Company

Shareholders	Amount of shares	Paid-up capital (Rs lakhs)	Percentage share
Sumita Ghose	1,00,000	10.000	21.36
Artisans	1,16,300	11.630	24.85
AMFPL	1,42,500	14.250	30.45
Aavishkaar	1,09,250	10.925	23.34
Total	4,68,050	46.805	100.00

A board of directors was constituted with the following composition:

AMFPL	--	1
Artisans	--	4
Aavishkaar	--	1
Promoter (Sumita Ghose)	--	1

The Rangsutra SRC was one among 18 such supplier companies initiated by FabIndia. However, this was the only one with an NGO background. The rest were run with purely profit motivation.

Marketing Strategy

Sumita recognized early that marketing was not the main problem and that there was a market for the artisan's produce in the 'high-volume low-margin' (HVLM) segment. There was also scope in the high-end market. However, organizing the producers and building the value chain to produce goods for such a segment was the big challenge. With the signing of the deal with FabIndia, Rangsutra found an entry into the HVLM segment with a national reach. With more than 80 stores all over the country and a target of reaching 300 in the near future, FabIndia was on a roll.

FabIndia's product positioning matched perfectly with that of Rangsutra. Its products were positioned as fashion garments with ethnic flavour, that were priced reasonably. FabIndia's name had found its way into tourist guides such as the *Lonely Planet*. Foreign tourists frequent its stores besides the fashion-conscious upper-middle and middle class Indians. FabIndia's pricing policy is in keeping with its product positioning. It marks up

its products by 70-100%, which is lower than leading brands like Trent or Westside.

Interestingly, a small group of new entrepreneurs in the retail sector approached Rangsutra with the offer of space in an upcoming mall in Delhi. They offered to provide space and promotion costs whereas Rangasutra would provide the product. Rangsutra Producer Company took up this offer, and the shop opened in May 2008. During the first year, the profit was to be split in the ratio of 70:30. However, from the following year, it was to be shared on 50:50 basis.

In terms of competition, the biggest threat on the horizon for the HVLM segment are imitation products coming into the market from China. Even the traditional tie-and-dye skill of Rajasthan and Gujarat such as the unique colourful *bandhani* has been imitated, and Chinese *bandhanis* are now available in the Ahmedabad market. To counter this threat, Rangsutra and others may need to do social marketing, and provide certification that assures the consumer that the product is made by Indian artisans in the authentic traditional way.

Building the Value Chain

Rangsutra's suppliers comprise artisans' SHGs supported by various NGOs. Currently the following NGOs are associated with Rangsutra (both private and producer companies), in varying degrees of collaboration.

1. Urmul Marusthali Bunker Vikas Samiti, Falodi, Jodhpur
2. Urmul Seemant Samiti, Bajju, Bikaner
3. Vasundhara Gramothan Samiti, Loonkaransar, Bikaner
4. Society to Uplift Rural Economy, Barmer
5. North East Social Trust, Assam
6. Bharat Gyan Vigyan Samiti, Jaipur
7. Sunderban Khadi and Village Industrial Society, West Bengal
8. Mahila Sanatkar, Hyderabad
9. Mahila Umang Samiti, Uttarakhand
10. Shramik Bharti, Kanpur
11. Khamir Weaves, Bhuj

Rangsutra's role is to provide design and marketing inputs to the artisan groups. It also takes care of coordinating production and quality control, and is responsible for delivering the goods to the godowns of FabIndia within the stipulated time schedule. Sometimes, it also gives advances and credit in order to get the groups on their feet. For its service, it gets about 15-20% of the price spread.

In the near future, Rangsutra plans to work directly with SHGs rather than through NGOs. Currently, the overheads are rather high at 20-30%. This is because the units are spread out geographically, leading to high costs of supervision. The need is to find ways to bring down its overhead costs. However, it is not willing to give up the diversity of groups, which in a way provides it the ability to meet the demands of the market by pooling of skills. For instance, a company got an order to provide material with an extra weft weaving. This order was split between Assam and Jaisalmer, both of which practise this craft. The groups in Jaisalmer have lot of talent for embroidery and there are other groups that specialize in dyeing. Coordinating these diverse skills and integrating them into designs that meet the market demands is what Rangsutra's designers do. However, the cost of coordination is high because of the transportation costs involved.

During 2007, the company got many orders but production lagged behind. The reasons were many. First is the low wages realized by artisans. In Pokhran, there are 130 weavers. They got an order that was to be completed in two months. However, only 80 weavers came forward because the construction industry was paying them Rs 120 a day, which was more than what they got through weaving. Besides they also liked city life, and were attracted to migrate in search of labour. Rangsutra has managed to increase the weaving rate from Rs 10-15/m to Rs 50-54/m. As a result, their income has gone up from Rs 2,000–2,500/month to Rs 4,000/month.

In order to meet the demand, Rangsutra had to procure power loom fabric in the past. Khadi and Village Industries Commission (KVIC) has motorized handlooms near Dholka in Gujarat that produce 'terekhadi'. Even here, the filling of bobbins is done by hand. Rangsutra is looking for a machine that can perform this task thereby saving time. It is also interested in more mechanized ways of making the warp.

The Government of India is also keen on promoting Indian artisans, and funds are available for the purpose with the Handicrafts Department. Recently Rangsutra's producer company was offered a grant to develop a cluster of weavers in Bikaner District of Rajasthan. The weavers are already there, they just need to be organized and provided the right kind of inputs. They are expected to produce cloth worth Rs 2000,000 a year.

Unique Organizational Strategy

Sumita is the CEO of the private company as well as the producer company. Rangsutra has its head office in Delhi so that it can be in touch with the market. There are three designers at the head office, who travel to the groups in order to provide inputs and assistance. In addition, there is a field office in Bikaner, which has staff strength of 12. There is no shortage of designers, with the National Institute of Fashion Technology

providing fresh batches of trained graduates every year. However, care has to be taken that the people who join the organization have the right values and the interest of the artisans in their hearts. The producer company has only one designer. The rest are outsourced.

Though not initially planned, Rangsutra finds it has a unique organizational strategy, with a combination of a private company to look after the commercial end, and a producer company to look after the producer and product development side of the business. Private investors cannot invest, and are not interested in investing in producer companies. Rangsutra Private Company, therefore, became a necessity. However, private companies are not eligible for developmental grants. The producer company on the other hand gets grants for design development as well as for building the capacities of artisan groups. The NGOs too have access to grants. They are willing to pay fees to the producer company for services provided. In this way, the two arms of Rangsutra work in tandem with each other. Table 2 shows the Actor-Function matrix for the present set-up.

Table 2: Actor-Function Matrix – Current

Functions	Actors					
	Artisan groups	Associated NGOs	Rangsutra Private Company	Rangsutra Producer Company	Partner Institutions	Fair Trade Buyers (Export)
Design inputs			√	√	(FabIndia, Aavishkaar)	√
Production planning	√	√	√	√		
Aggregating and coordinating production			√	√		
Technology inputs to improve processes	√	√	√	√		
Credit and finance		√	√			
Quality control	√	√	√	√	√	
Logistics function		√	√	√		
Marketing functions			√ (HVLM markets)	√ (LVHM markets)	√ (FabIndia) (HVLM markets)	
Customer services			√	√	√ (FabIndia)	
Welfare functions for artisan groups		√		√		

Future Plans

Table 3 presents the actor-function matrix with projections for the future (after 3 years). As the matrix shows, Rangsutra will work directly with artisan groups and, therefore, NGOs may not have much role to play other than taking care of the welfare functions. Rangsutra's producer company may increase its own line of products through its exclusive shops and explore new markets on its own.

Table 3: Actor-Function Matrix - Projected

Functions	Actors				
	Artisan Groups	Associated NGOs	Rangsutra Private Company	Rangsutra Producer Company	Partner Institutions (FabIndia, Aavishkar)
Design inputs	√		√	√	
Production planning	√				
Aggregating and coordinating production			√	√	
Technology inputs to improve processes	√		√	√	
Credit and finance	√		√	√	√
Quality control	√		√	√	
Logistics function	√		√	√	
Marketing functions	√		√	√	
Customer services			√	√	√
Welfare functions for artisan groups		√		√	

Rangsutra's private company is planning to become a public (unlisted) company, because the existing laws do not allow the company to have more than 50 shareholders. As a result, 700 artisans have been clubbed under SHGs, and only one shareholder per SHG has been allowed. Going public will enable Rangsutra to remove this anomaly and make all artisans legal shareholders in the company. The company may also allow internal trading of shares so that artisans may have liquidity when needed. Apart from that, two Dutch women, have shown interest in investing in the company. It is proposed that new shares will be issued at five times the profit after tax, the previous year.

End-notes

1. Based on information provided by Sumita Ghose, CEO and founder of Rangsutra

6 Community Friendly Movement: Creating Wealth for Artisan Communities of India[1]

Introduction

Community Friendly Movement (CFM) is a fair trade organization based in New Delhi. Its mission is "to create wealth for its primary stakeholders — the artisan communities at the bottom of the supply chain — by providing design inputs, process improvements and market linkages." As a supply chain manager for many artisan communities, CFM provides a one-stop shop for retailers and wholesalers, looking to source quality handmade products from developing countries.

CFM is all about the efforts of a social entrepreneur to create a movement that brings together the concerned consumers and the artisan communities, struggling to make two ends meet in far-flung places. It is an effort to reach out to these impoverished communities — the repositories of Indian culture — that find themselves on the brink of extinction in a rapidly globalizing economy.

CFM was registered as a not-for-profit organization under the Societies Registration Act XXI of 1860, India, in 2005. A young professional, Rahul Barkataky, founded the organization when he realized tremendous potential in the handicraft sector. He realized that the artisan communities needed to be organized on the one hand, and the consumers made aware of their power in making a difference through the choices they made in order to fulfill that potential. He was aware that a supply chain existed, but without volumes, this did not convert into more jobs. So the challenge was to achieve volumes by creating a model to increase efficiencies in the market chain, and make prices competitive enough so as to give artisans remunerative returns for their labour.

CFM began by tapping the export market and succeeded in creating such a model within two years. In 2007–08, it achieved a turnover of US $1,50,000, and in the process, broke even. It expects to double its turnover by the end of the following year. It

has set itself an ambitious target of $ 1,000,000 US dollars by 2010. CFM was selected as one of the 20 projects to attend the Global Social Benefit Incubator Programme at Santa Clara University.[2] The case provides a unique model of market-led intervention that successfully addresses the issue of poverty amongst artisan communities.

Genesis of CFM

Rahul Barkataky, a post-graduate from the Indian Institute of Rural Management, Anand, had some experience in social entrepreneurship. Soon after passing out from the institute, Rahul and two other friends set up MITRA Technology Foundation, with financial support from ICICI Bank. At present, MITRA owns and manages iVolunteer, India's largest volunteer placement platform. Initially MITRA developed an online platform that allowed an individual to contribute meaningfully to the development sector in India. One of the verticals was an e-commerce site, which provided an opportunity for crafts organizations to sell their merchandise. This site was owned and managed by CraftsBridge India Private Limited. But it never took off in terms of volumes. Rahul felt that the enterprise failed because like many other such initiatives, it had adopted the wrong model, seeking to reach the HMLV segment without addressing the inefficiencies in the existing supply chain.

Rahul decided to take a sabbatical from MITRA, and start a new enterprise. He was inspired by WalMart, a retail chain in the US, which believed in passing on to the consumer whatever the company saved through efficiency in the supply chain. He was also inspired by e-Bay, which was able to create a transparent platform in which the buyer and the seller could meet, and carry out transactions to the satisfaction of both.

During this time, Rahul got in touch with Arjun Adya who had more than 15 years of experience in export market. Arjun and one of his friends were interested in developing a model of using un-conventional marketing models to reach out directly to customers in the US. To test their model, they took a warehouse in California on rent, and filled it up with quilts made in Jaipur. Using virtual marketing, they began to access their clients in the US. The quilts moved fast, and within six months, goods worth about US$ 25,000 were sold.

Though virtual marketing provided the possibility of linking distant consumers with producers in remote villages to scale up and achieve volumes, there was a need to bring about a sense of community between the producers and consumers. Here, CFM got inspiration from the 'get milk campaign' in the US, which achieved the twin goals of rejuvenating the dairy industry while improving the diet of the youth. The idea of creating 'community friendly movement' was born. The name was deliberately kept ambiguous because the founders wanted people to get intrigued to know more.

Strategies for Reaching the Discerning Consumer

CFM's product range comprises fashion accessories, including jewellery, bags and pouches as well as home décor products such as quilts, tabletop items, and table linen. It has consciously stayed out of the garment business in which the margins are higher. CFM decided to position its products as 'quality, handcrafted products at a competitive price'. Hence, quality became a critical consideration for the supply chain whereas price became the main plank for competing in the marketplace. A related decision was not to take small orders. Hence, minimum order quantities were prescribed for every single product on the catalogue. However sometimes, small orders are taken to establish long-term linkages. Product positioning, and marketing strategies for both international and domestic markets are the same. However, there are differences in terms of distribution channels.

International markets

In the international market, the buyer specifies the requirements. CFM's designers then see how to address the needs of the buyer. The volumes are usually high and each order could be in the range of US $50,000–$100,000. For the buyer, CFM is a one-stop shop because it takes responsibility right from developing the product to shipping it. It also provides a guarantee for quality, which allows the buyer to reject a product if it does not meet the specifications. It goes to the credit of the supply chain that so far none of its shipments has been rejected. Sometimes, a buyer may place an order at a fixed price. In such cases, CFM designers and merchandizers work with the artisan groups to reduce the cost, and give the buyer options.

In the international market, the orders are also season specific. Providing a speedy response is the key to bagging an order. Initially, it took CFM designers about 30 days to develop a sample. This has now been brought down to 15 days. Several measures were taken in order to accomplish this. All suppliers were connected through Internet. A 'specification sheet' was developed, which had standardized colour specifications. These measures ensured that the suppliers understood exactly what was expected from them, and they were able to develop the samples in time. Once an order was processed, CFM engaged the services of the shipping agents, who also took care of custom clearance and other formalities. The product then reached the buyers in foreign countries, who were usually big retail chains and bulk purchasers.

CFM is now trying to become a distributor in the US. It has established a private company called CFM Connect LLC in the US to look after the wholesale business. It books orders from several stores there, with a minimum order value of US $100 and

a delivery schedule of one month. In this way, CFM is able to offer very competitive prices directly to small stores in the US.

CFM does 'truthful labelling' to certify that the goods are handcrafted. Certifications from the Fair Trade Federation in the US and the International Resources for Fair Trade have also been obtained. These measures do help in the sale of products.

Domestic markets

To get an understanding of the domestic market, CFM has launched a pilot in India by selling its goods through three stores — two in Delhi and one in Goa. Maintaining the same strategy of achieving volumes, CFM has tried to cut overheads while expanding rapidly. It has, therefore, decided to partner with retailers rather than set up its own stores. The retailer gets 20-35% margin, and does not have to invest in the working capital because he/she gets 15-30 days credit. Because the sales keep increasing, it keeps the retailer happy.

The principle target segment is young urban women. CFM relies on word-of-mouth publicity. With each product, it provides a tag with a write-up on the organization's mission, along with its website address. It has planned a strong Internet presence. However, bringing traffic to the website is never easy. With the help of the tag, CFM is able to communicate with its clients. Many of its customers are repeat buyers, indicating that the tag may have created an impact. People feel good when they read that their decision can positively affect the lives of poor artisans. They are also willing to make gift purchases for the same reason. People, who have once bought a product from the store, also do not mind purchasing on the Internet subsequently.

In the three months since the retail initiative was started, the growth has been 100% per month. By December 2008, CFM expected to have about 25 stores spread all over urban India. Domestic sale is expected to be as large as the international sales. To manage this part of the enterprise, CFM has planned a separate team, with access to venture capital fund. The unit will need adequate working capital and unconventional marketing strategies in order to realize its goals.

Strategies for Strengthening the Supply Chain

CFM works with selected groups of artisans in different parts of the country, including Andhra Pradesh, Bihar, Jammu and Kashmir, Rajasthan, Gujarat, and Uttar Pradesh. The artisans are expected to follow stringent quality control, the standards for which are stipulated in a supplier manual. To improve efficiency in the supply chain, CMF decided to work with local entrepreneurs, who agree to organize the groups, and work

on commission basis. These entrepreneurs are themselves artisans and, therefore, fully understand the nuances of the craft. They get a margin of 10-15% of the sales and, hence, are motivated enough to work for volumes. As on date, there are 18 local entrepreneurs, including 3 women.

CFM strives to build long-term relationships with these entrepreneurs and artisan groups and guarantees to keep on sourcing from them as long as they adhere to the prescribed quality standards. It moves on to another group only when the capacity of the group is saturated. CFM also assesses the performance of the groups once every six months on the basis of objective criteria such as transparency, accounting, quality, timely delivery, loyalty, etc. Feedback is given to them, which helps to improve their performance. Those who persistently fail to improve are blacklisted.

The system of payment is designed in such a way that it ensures supply of the product. On approval of the product sample, the group gets 25% payment as working capital, on condition that it shows the raw material procured. It gets another 25% on completing production, and the final payment is made when the goods reach CFM's godowns.

CFM has collaborated with the National Institute of Fashion Technology (NIFT), which has a programme to promote clusters of artisans. It has also hired people from NIFT as designers. It believes that the artisans must get a fair share, that is, at least 25%, of the price spread. Besides wages, there are also measures to take care of welfare needs. About 10% of CFM profits have been put aside into an artisan welfare fund. The artisans will themselves come up with a proposal for using this fund, which is currently to the order of Rs 15 lakhs.

When promoting a new group, CFM's merchandizers work closely with the artisans to make sure that they buy the right material and produce products with the right specifications. In this way, the learning cost is considerably reduced. CFM has had to reject entire lots of production in some cases because these did not meet the quality standards. The artisans, however, were paid the wages so that they did not suffer. The local entrepreneur has a stake to ensure that artisans learn fast because they too realize that there is no scope for charity while dealing with markets.

CFM proposes to keep on increasing volumes because this will enable it to decrease margins in the long run. It also plays the function of absorbing market risks. For

instance, the recent drop in the exchange rate between US dollar and the Indian rupee affected the business but the artisans did not suffer.

In a bid to further improve the efficiency of the supply chain, CFM is setting up Facilitation Centres with the help of other industries. One such centre has been established in Noida; it will cater to all artisan groups in and near Delhi region. The centre will help to improve the logistics by integrating various services under one roof.

Organizational Strategies to Match CFM's Mission

Initially, CFM was established as a Society because it needed the seed capital to invest in the producer groups, which it got from the Ford Foundation. Now that the supply chain has been set up, CFM is in the process of setting up a private company, *RBN Market Linkages Pvt. Ltd.,* which will look after the trading component of the enterprise. Artisans and local entrepreneurs are expected to buy shares in the company so that they too can become partners in the enterprise. Artisans will be allotted shares, and the money recovered later through their sales. Local entrepreneurs will have to buy shares at a face value higher than that for the artisans.

In due course, artisans will be encouraged to form private companies of their own because they will need to scale up their operations. Micro-finance institutions, expectedly, will be willing to invest in them. Once this is done, the entire chain, right from the artisan to the consumer, will comprise private companies. The Society will continue to perform capacity building and welfare functions. (Tables 1 and 2 for Actor-function matrix – current and projected).

CFM has a young team of eight professionals, which comprises designers and merchandizers. Their average age is 29 years. Whereas the designers look after product and design development, the merchandizers are in control of the production cycle. It has a healthy gender balance, with about 50% being women. This is very useful because about 50% of the artisans are also women, and the female staff is able to interact better with the women artisans.

CFM organizes an annual gathering, called CFM Connect, on every 15th February, which brings together buyers, artisans, and entrepreneurs. The latter two are provided awards for outstanding performance during the year. In 2007 about 50 people attended the meet. The awardees received digital cameras, which helped them further in their work. Special sessions on costing, fair trade, etc., were organized for the artisans and local entrepreneurs during the meeting. During this interaction, buyers come with ideas of what they want to source in the coming year. This helps the local entrepreneurs to plan products in advance.

Table 1: Actor-Function Matrix (2008)

Functions	Actors		
	Local Communities	Social Entrepreneurs	Partner Institutions
Aggregating production	Artisan groups, local entrepreneurs	CFM	
Training and capacity building	Local entrepreneurs	CFM	
Quality control	Local entrepreneurs	CFM	
Logistic functions		CFM	Shipping agent
Marketing functions, negotiating with buyers		CFM	
Credit and finance		CFM	Buyer
Process improvement	Local entrepreneurs	CFM	
Technology/Design inputs		CFM	NIFT
Coordination and management		CFM	
Production planning and management	Local entrepreneurs	CFM	
Customer service		CFM	
Welfare functions		CFM	
New product development	Artisans/Local entrepreneurs	CFM	Buyer

Future Plans

CFM's vision is "to improve the lives of 10,000 artisan communities globally by selling US $ 1 billion worth of merchandise and creating a million jobs in the process."

Once the distribution chain is built, CFM thinks it can put other things such as organic food through it. In order to revive dying arts, it may have to put in more effort. A new brand may be created, and a niche market segment developed with a wonderful story. This, however, will take time. The immediate task is to create a buyer base, and slowly start introducing new ideas to the buyers.

Table 2: Actor-Function Matrix – Projected for 2010

Functions	Actors		
	Local Communities	Social Entrepreneurs	Partner Institutions
Aggregating production	Local entrepreneurs/ Artisans	RBN Market Linkages Pvt. Ltd.	
Training and capacity building	Local entrepreneurs	CFM	NIFT/NID/ Management institutes
Quality control	Local entrepreneurs	RBN	
Logistic functions	Local entrepreneurs	RBN	Shipping/Logistics company
Marketing functions, negotiating with buyers		RBN	
Credit and finance	Local entrepreneurs		Banks/Microfinance institutions/Investors
Process improvement	Local entrepreneurs	CFM	NID/Other specialized institutions
Technology/Design inputs		RBN	Buyers/Retailers
Coordination and management		RBN	
Production planning and management	Local entrepreneurs	RBN	
Customer service		RBN	
Welfare functions		CFM	
New product development	Local Entrepreneurs	RBN	Buyers/Retailers

End-notes

1. Based on information provided by Rahul Barkataky, CEO, CFM, as well as information available on the organisations's website.

2. The programme is designed by the Center for Science, Technology and Society of Santa Clara University, USA, to assist social benefit entrepreneurs in developing business plans that will sustain, and scale their organizations to reach increasing numbers of beneficiaries.

Annexures

1. Glossary of Terms
2. Resource Guide
3. Resource Institutions
4. About the Contributors

1. Glossary of Terms[1]

Adat: The commission agent operating through a *mandi*.

Backward linkages: The linkages developed with suppliers, who agree to supply specified quantities (often in bulk) of inputs, to primary producers. These supplies are associated with bulk discounts, the extent of discount depending on the nature of the market, and the ability of the agency or CBO to negotiate terms with the suppliers.

Bio-industrial watershed: A stage in watershed development wherein agro-processing/bio-processing units are established by local communities and groups, who not only own but also control these units.

Community-based entrepreneurship: The collectivization of many self-employed individuals, groups or micro-enterprises, in order to deal more effectively with the market forces, leading to economic viability for the members as well as the collective institution as a whole. Here, collectivization is seen as a process of empowerment because it enables poor women and men producers to access markets, and negotiate prices for inputs and outputs, which individually would not be possible. It also helps to access credit, new technology and skills, market intelligence and other resources, and to develop a separate identity for themselves as well as brand equity for their products and institutions.

Contract farming: An agreement between farmers and processors and/or marketing firms for the scientific production, and supply of a specified agricultural product at a frequently and mutually pre-determined price. Technical guidance on cultivation practices, harvesting, storage, etc., and quality inputs at wholesale rate are assured by the contract to farmers (Gahukar, 2007).

Consumer resistance: The resistance of a consumer to shift to a new product or service when the latter offers several societal or environmental advantages but requires the consumer to pay a higher price, or make higher investments, or make changes in lifestyle, etc. (Pastakia, 1998)

Entrepreneur: A person who brings together land, labour, capital and technology to run an enterprise or economic activity that:

- Produces goods and services that society values and is, therefore, willing to pay.
- Generates employment for others.
- Generates profits for himself/herself and his/her investors.

Entry barriers: The barriers that prevent an entrepreneur from entering a particular node of the value chain, such as high technology, high capital, large volumes, and lack of trained personnel.

Forward linkages: These are built with potential buyers, who provide some kind of assurance to purchase specified quantities of the produce at reasonable prices, provided it meets the quality specifications. Producers are able to secure a better price collectively not only because they can bargain on quantities but also because they can by-pass several nodes of the value chain.

Gross margin analysis: Sales minus direct costs. In the context of value chain analysis, the estimation of the gross margins of different players of the supply chain or value chain is useful to get a rough idea of the profitability of operations at different nodes. Gross margin is usually expressed as a percentage of sales in order to make meaningful comparisons.

Haat: Informal, often weekly, local village market, which serves the needs of a cluster of villages.

Industrial ecology: When the wastes of one unit in an industrial cluster feeds into other units as inputs thereby minimizing the overall effluents/wastes generated by the industrial cluster as a whole.

Mandi: Government-supported local commodity market called Agricultural Produce Market Committee.

Market: i) A place where goods and services are sold or bartered. ii) A segment of the economy (such as water market or labour market) or potential consumer base (such as youth market or urban market).

Marketing or marketing management: The process of creating and delivering value to the consumer through sequential steps of choosing, producing and communicating superior value (Kotler et al. 2009).

Market intelligence: The information about the price of a particular commodity or product in the local and the distant markets at a given point of time. It also refers to past information about the movement of prices and their trends.

Marketable surplus: The commodities or goods produced by a farmer in excess of the amount needed to provide food security for the family, which is sold in the open market to generate cash income.

Marketing channel: A traceable path through a production or distribution system of product transformation.

Marketing mix: The set of controllable tactical marketing tools — product, price, place and promotion — that the firm blends to produce the response it wants in the target market (Wikipedia, accessed Feb 2009).

Market-led approach: A business approach where customers' needs and wants are identified through market research before designing or offering a good or service (BusinessDictionary.com accessed March 2009).

Market-led intervention: An intervention that seeks to increase the price realized by the farmers and other primary producers through better marketing or by addressing market imperfections.

Material balance: The conversion ratio of material as it moves from one stage of value addition to another. When carrying out a gross margin analysis of a value chain, it is useful to first work out the material balance. Without considering the weight loss during conversion, it will not be possible to get an accurate estimate of the direct costs.

Micro-enterprise: An enterprise at the grassroots level that is far smaller than the existing norms for small-scale enterprise. A small-scale enterprise generally has an investment, which is more than Rs 10 million. Although government has not stipulated norms for the minimum level of investment in a micro-enterprise, usually an investment of greater than Rs 15 lakhs and employment of up to five persons is taken as a norm for micro-enterprise in various studies. Enterprises are classified on the basis of scale, for legal and administrative purposes.

Nano-entrepreneur: An individual at the grassroots level, who takes on the role of service provider to other farmers/enterprises, etc. In the process, he/she makes investments and bears risks, which though much less than what is involved in micro-enterprise, is relatively no less in magnitude, given the fact that such entrepreneurs have very little savings. Soumen Biswas (CEO, PRADAN) coined the term during an interaction.

Price spread: The share of different members of a value chain in the terminal price of the product. Price-spread analysis refers to the quantification of the shares of different players in the terminal price.

Ruling constraints: The constraints that hamper or impede the performance or efficiency of the functionaries at different nodes of the value chain or supply chain.

Self-employment: An economic activity carried out by a person in order to support his family but which does not generate additional employment. Unlike a nano-entrepreneur, a self-employed person does not bear any risk because the economic activity is well established and practised by many, and the market for his/her service/product is readily available. Typical examples of self-employment activities include running an auto-rickshaw to transport people and goods, setting up a grocery store in the village, door-to-door selling of consumer goods such as bangles, etc.

Social entrepreneur: An entrepreneur who sets up and runs an enterprise/institution/

initiative with a social goal rather than purely for profit. In the case of an economic enterprise with a social goal (such as popularizing alternative energy powered devices in order to preserve the environment), profit may be a means for long-term sustainability of the enterprise. Such organizations are governed by the 'double bottom line', in which success is judged by the ability to achieve the social goal(s) as well as to maintain profits. Social activists such as Nobel Peace Prize winner, Muhammad Yunus, believe that such social business represents the future of capitalism.

Strategic marketing: The process of preparing a strategic plan to market a product or group of products by choosing an appropriate market segment and determining the value positioning of the product (Kotler et al., 2009)

Sub-sector: An aggregation of alternative marketing channels (includes supply chains and value chains) for one or a group of closely related products. The final product or a key raw material can be used to delineate a sub-sector.

Supply chain: A system of organizations, people, technology, activities, information, and resources involved in moving a product or service from supplier to customer (Wikipedia, February 2009). Also known as the logistics network.

Tactical marketing: The steps involving delivering and communicating value to the consumer once a strategic marketing plan has been formulated. The first involves decisions regarding specific product features, prices, distribution, etc., whereas the second involves utilizing the sales force, sales promotion, advertising and other communication tools to announce and promote the product (Kotler et al., 2009).

Terminal Price: The final price that the consumer pays for a product after it has undergone transformation through a value/supply chain.

Value chain: The full range of activities required to bring a product from its conception to its end use and beyond. This includes activities such as design, production, marketing, distribution, and support to the final consumer (Ruijter de Wildt, Elliott, & Hitchins, 2006). Also referred to as a vertical alliance (or strategic network) of enterprises (within a supply chain), collaborating to achieve a more rewarding position in the market (Agriculture & Food Council of Alberta, 2002).

Value chain analysis: The methodology by which the structure and processes of a value chain are understood. The objective of such an analysis could be to examine how an existing value chain works and whether there is scope for upgrading it.

End-notes

1. Explanations are self-compiled except where references are provided.

2. Resource Guide

Rural Marketing

1. The Rural Marketing Book

Pradeep Kashyap and Siddharth Raut (2008)

354 pages; Rs 379 (with CD)

Biztantra, An imprint of Dreamtech Press, New Delhi

Offering insights and experience along with the theory of rural marketing from the stalwarts in the field, the book explains in detail all relevant topics from rural market environment to consumer behaviour in rural areas, with examples from across the country. It also details the strategies of product marketing, distribution, and communication.

2. Rural Marketing: Targeting the Non-urban Consumer

Sanal Kumar Velayudhan (2007)

249 pages; Rs 295

Response Books, Business books from SAGE, New Delhi

Providing insights into the essential features of rural markets in India as well as the challenges posed by the rural consumer, the book explains in detail, with illustrations and case studies, rural consumer behaviour, market opportunities, marketing and distribution strategies, communication and promotion strategies, institutional arrangements for marketing, and distribution in rural areas. The book also gives a fair idea of emerging channels to access rural markets.

3. Rural Marketing: Focus on Agricultural Inputs

Sukhpal Singh (2004)

138 pages; Rs 235

Vikas Pubblishing House, New Delhi

Exploring core aspects of rural marketing with its primary focus on marketing agricultural inputs, the book provides an in-depth understanding of the market and suggests input-specific solutions for better marketing. It also includes cases and strategies on rural marketing.

Marketing Management

1.Marketing Management: Analysis, Planning, Implementation, and Control

Philip Kotler (1987), 9th edition

789 pages; Rs 4272

Prentice Hall of India Pvt. Ltd. (Pearson Education Inc.), New Delhi

Focusing on the major decisions marketing managers and top management face in their efforts to harmonize the objectives and resources of an organization, and the needs and opportunities of the marketplace, the book applies marketing thinking to products and services, consumer and industrial markets, profit and non-profit organizations, domestic and foreign companies, small and large firms, manufacturing and middlemen businesses, and low-tech and high-tech industries. Boxed exhibits in the texts have been classified and colour-coded into four groups — strategies, marketing concepts and tools, marketing environment and trends, and companies and industries. The book also includes material on local marketing, category management, total quality improvement programmes, trade shows, and building marketing culture. There are statistics and analyses of new trends and developments in the environment, discussions on strategic marketing and developments in marketing planning, organization, implementation, and control. The growing use of computers, telecommunications and other new technologies in improving marketing planning and performance is also covered.

2. Principles of Marketing

Philip Kotler and Gary Armstrong (2006)

651 pages; Rs 525 (Indian Reprint)

Prentice Hall of India Pvt. Ltd. (Pearson Education Inc.), New Delhi

One of the most comprehensive books on marketing, it is a storehouse of material on marketing processes, strategies, consumer markets and behaviour along with latest illustrations, case studies, photographs and charts. The book gives detailed information on pricing consideration and profitable consumer relations. It also explores trends in high-tech markets and the impact of marketing strategies on buyers and marketers.

3. Essentials of Marketing: A Global-managerial Approach

William D. Perreault and Edmund Jerome McCarthy (2006), 10th edition

638 pages; Rs 928

McGraw-Hill/Irwin

Critically revised, updated, and re-written to reflect new concepts, new examples and recent best practices, the book builds on the foundation pillars

of previous editions — the four Ps framework, managerial orientation, and strategy planning focus. Its focus is on how a manager makes marketing decisions about what customers to focus on, and how best to meet their needs. This edition extends the strategy planning approach, integrating concepts tightly with the marketing-strategy planning model. The authors have made ongoing changes to the text to reflect marketing's best practices and ideas. The supporting materials have been more widely used than any other teaching material for introductory marketing.

4. Marketing in India: Cases and Readings

S. Neelamegham, (1974) 3rd revised edition

526 pages; Rs 475

Vikas Pubblishing House, New Delhi

Reflecting the current thinking on the subject of marketing management, the case studies and articles in the book provide perspectives on key issues and problems faced by Indian marketers in the new millennium. The issues, concepts and perspectives presented in the book, cut across different disciplines and encompass a wide range of business experience. The articles cover topics like marketing and its changing role in the liberalized Indian economy, strategic marketing, urban and rural marketing, global competitiveness, marketing mix strategies, product pricing, distribution and promotion challenges in the context of the Indian marketing environment, sales-force management, and control. The case studies present real-life problems faced by Indian marketing executives and provide an opportunity for the concepts and tools to be employed in practice.

Livelihood Promotion

1. Facilitator's Handbook on Grassroots Enterprise and Exports

Madhura Chatrapathy, et. al (2007)

162 pages; Rs 650 (with CD)

Asian Centre for Entrepreneurial Initiatives (ASCENT), Bangalore.

Explaining in detail the process to start and manage group enterprises, the book includes guidelines on product development, running common facilitation centres, developing marketing strategies, evolving pricing strategies, and processing export orders. It also outlines the basic understanding on quality management, packaging, and finance management. The book also gives proformas on export documentation.

2. A Resource Book for Livelihood Promotion

Sankar Dutta, Vijay Mahajan, and Gitali Thakur (2004) 2nd edition

321 pages, Rs 600

The Livelihood School ,BASIX,Hyderabad

A compilation of livelihood promotion practices in different geographical and socio-economic conditions by various agencies, the book gives insights on various approaches and processes that have worked in Indian scenario. The book also provides a framework for choosing and analyzing a sub-sector and designing livelihood promotion interventions.

Entrepreneurship Development

1. Development of Entrepreneurship

G.S. Batra (2002)

170 pages; Rs 108

Deep & Deep Publications Pvt. Ltd.,New Delhi

A useful reference for entrepreneurs, business managers, students, researchers, and all those concerned with improving the small-scale industry and developing entrepreneurship. The book highlights the emerging issues of entrepreneurship development and the management of small-scale industry. Small enterprises, because of their unique economic and organizational characteristics, play a social and political role in employment creation, balanced regional development, income-generation, and promote change in a gradual and peaceful manner. Entrepreneurship development in the small-scale sector can address a number of developmental issues like the dispersal of industrial units, meeting the massive unemployment problem, a more equitable distribution of national income, mobilization of local resources, capital that might otherwise go unutilized, and rejuvenation of the depressed state of economy.

2. A Field Manual for Sub-sector Practitioners

Steven J. Haggblade and Matthew S. Gamser (1991)

91 pages; GEMINI (Growth and Equity through Micro-enterprise Investments and Institutions), Bethesda, Maryland

Manual can be downloaded from: http://pdf.usaid.gov/pdf_docs/PNABJ797.pdf

Gives step-by-step procedures on how to analyze sub-sectors in the economy and explains how this can lead to the promotion of micro and small-scale enterprises (MSEs). The manual looks at the broad system in which MSEs operate, including large firms that compete with MSEs, in order to understand

opportunities and constraints. It also examines competition among small firms and coordination among firms active in the sub-sector. It deals with identifying cost-effective interventions as those that influence large numbers of firms with a single policy or action, known as 'leverage'. The manual can be used as reference material, and can also serve as the basis for creating customized training for individual organizations.

Social Entrepreneurship

1. Strategic Tools for Social Entrepreneurs

J. Gregory Dees, Jed Emerson, and Peter Economy (2002)
326 pages; Rs 1669
John Wiley & Sons, Inc., New York NY

Focusing on improving entrepreneur effectiveness through case studies and interviews with social entrepreneurs, the book is useful for day-to-day management and strategic positioning of non-profits. It discusses how to create value, plan growth in new directions, and manage the changing organization.

2. How to Change the World: Social Entrepreneur and the Power of New Ideas

David Bornstein; (2005) 2nd edition
320 pages; Rs 395
Penguin Books India Pvt. Ltd., New Delhi.

Highlighting the lives of remarkable individuals from different countries and different times, who had the vision to create something new, the book gives inspirational accounts on how an idea can transform the lives of thousands and millions. The book has stories of excellence from non-profit organizations with high-impact ideas.

3. I Too Had a Dream

Kurien Vergese - as told to Gouri Salvi (2006)
249 pages; Rs 395,
Roli Books Pvt. Ltd., New Delhi

In these memoirs, Dr. Vergese Kurien, popularly known as the 'father of the white revolution', recounts the story of his life and how he shaped the dairy industry in India. A true visionary, Dr. Kurien was among the first to visualize the importance of building pro-poor rural value chains in India. The book provides valuable insights from his efforts to build pro-poor milk value chains

in India over a period of eight decades. He build a series of institutions which made India the world's largest milk producer, developed a logistic chain to produce and deliver hygienic and nutritious milk to millions and created the world's largest food marketing business. In the process he also created the country's most popular food brand (Amul). He enabled India to nearly double its per capita milk availability and made India's dairy industry the largest rural employment provider. The cooperatives he helped to build have also become powerful agents of social change in empowering rural households.

4. The Fortune at the Bottom of the Pyramid

Prahalad, C. K. (2006)
401 pages; Rs 525,
Dorling Kindersley (India) Pvt. Ltd., New Delhi

The book shows how the private sector can reorient itself, to contribute to development, and to address the problems of poverty and hunger. The author demonstrates that it is possible to develop business models that allow the poorest of the poor to participate actively in their own economic development by becoming entrepreneurs. Although the individuals at the bottom of the pyramid (BOP) have little money, collectively they represent a vast pool of purchasing power. They welcome opportunities to escape their oppressive burdens, including predatory intermediaries, corrupt governments and class barriers that require them to pay more than the rich for similar services. The author believes that serving the BOP consumers will demand innovations at all levels - technology, products and services, business models, institutions and governance. More importantly, it will require large firms to work in collaboration with civil society organizations and local governments. Market development at the BOP will create millions of new entrepreneurs at the grassroots level. Drawing upon case studies of successful social businesses from around the world, Prahalad puts forth a set of 12 principles that taken together constitute the building blocks of a philosophy of innovation for BOP markets.

5. Creating a World without Poverty: Social Business and the Future of Capitalism

Muhammad Yunus (2007)
Pages 261; Rs. 395,
Public Affairs, New York

Muhammad Yunus is better known for pioneering microcredit that has spread to every continent and benefited over a 100 million poor households, for which

he and Grameen Bank were awarded the Nobel Peace Price in 2006. Social business marries the interests of corporations with economic development of the poor and marginalized. In this book, Yunus shows how the creative vibrancy of business can be harnessed to tackle social problems from poverty and pollution to inadequate health care and lack of education. Between 1983 (when Grameen Bank was established) to 2006 the Grameen family had created over two dozen enterprises, the latest being Grameen Danone, which produces affordable nutritious foods for the poor in collaboration with Groupe Danone, a large French multinational corporation. The book draws extensively from the author's own experience in promoting the Grameen family of companies in Bangladesh.

Agribusiness

1. Corporate Agribusiness: Concepts and Cases

M.G. Deepika and S. Rajagopalan (2005)

226 pages; Rs 350

The ICFAI University Press, Hyderabad.

Providing a conceptual understanding of agribusiness, with a special focus on contract farming by the corporate sector, the book highlights the emerging areas in agribusiness in India. It also provides illustrations through case studies, debates the appropriateness of present trends in contract farming, and discusses government policies. The book gives a fair idea on emerging areas and the potential of agribusiness in the corporate sector.

2. Agribusiness Management

Gangadhar Bhatia (2007)

295 pages; Rs 795

Mittal Publications, New Delhi.

Introducing the basic tenets of agribusiness management, the book provides detailed analyses and practical approaches to planning and control, product decisions, pricing, and financing. It also discusses marketing and distribution strategies, and provides the analyses of costs and margins in selected sub-sectors.

3. Principles of Agribusiness Management

James G. Beierlein, Kenneth C. Shneeberger, and Donald D. Osburn (2003)

326 pages; Rs 3542

Waveland Press Inc. Long Grove, IL

Discussing in simple language the evolving agri-food system through planning, organizing, controlling and directing, the book discusses strategies and tools for improving efficiency and effectively maximizing benefits in agribusiness. The book provides elaborate examples on marketing, demand analysis, forecasting, production, finance, leadership, and human resources that are useful for agribusiness.

4. Dictionary of Agribusiness Management

L.L. Somani (2007)

216 pages; Rs 600

Agrotech Publishing Academy, Udaipur

A unique dictionary that covers the whole range of terms related to agribusiness management, the book includes essential entries from such fields as agri-input industries, non-food processing industries, clinics, information technology management, agribusiness economics and policy, finance, marketing, personnel and production, processing and value addition, and market intelligence. There are entries on many modern field, industrial, and laboratory techniques. Bold headwords provide quick and easy access to over 2,000 entries. Each entry in the dictionary has been defined with accuracy, completeness, and easy readability, to be readily accessible for students and professionals in agriculture.

Organic Farming

1. Vermiculture and Organic Farming

T.V. Sathe (2004)

122 pages, Rs 244

Daya Publishing House, New Delhi

Providing valuable information on the production aspects of vermi-compost, bio-fertilizers and biological pest control agents (BCA), the book discusses the importance of bio-fertilizers, species diversity, applications, and production techniques for *Rhizobium, Azotobacter, Azolla*, blue green algae, *mycorrhizae*, *Azospirillum*, green manure, organic composting, as well as the production techniques of various agents such as *Trichogramma, Chilonus blackburni, Cryptolaemus montrouzieri* and *Crysoperla carnea*.

2. Organic Farming: Standards, Accreditation, Certification, and Inspection

Dushyent Gehlot (2005)

358 pages; Rs 884

Agrobios, Jodhpur

Explaining the rationale of organic farming, the book serves as an introduction to organic agriculture, providing its basic principles and guidelines for converting a conventional farm into an organic farm. It dwells on the importance of establishing standards for organic agriculture in Indian conditions. The book provides contact details of key organizations working for promotion of organic agriculture in India. It also deals with the important topics of accreditation, certification and inspection as well as their respective agencies. It gives details on the global status of organic agriculture and marketing of organic products, and emphasizes the key challenges to organic agriculture, which include developing harmonized international standards, discouraging genetically modified crops and their contaminations, protecting price premium for organic produce, and consumer education.

Sericulture

1. Comprehensive Sericulture Manual

M. Madan Mohan Rao (2001

341 pages; Rs 539

BS Publications, Hyderabad

Besides explaining the technology required in sericulture activity, the book provides guidance on investment, silk marketing, accessing credit from financial institutions, and trends in the demand for silk in the domestic and export markets. It provides useful details of machinery suppliers, silk merchants, exporters and importers, as well as proforma for applying to the state government of Andhra Pradesh for assistance. The objective of the book is to help new entrepreneurs take up sericulture activity under self-employment.

Poultry

1. Livelihood Opportunities in Broiler Farming: A Livelihood Resource Book

Anish Kumar , H.K. Deka, Panjaj Das, and Pawan Ojha (2008)
118 pages;
PRADAN — Professional Assistance for Development Action, New Delhi

Focusing on the essential elements of a small holder poultry (broiler farming) model, the book elaborates on processes such as training, intensive production support, and veterinary services. It lays emphasis on promoting producers' collectives and developing market linkages in poultry. This book is in an easy-to-understand format, and includes checklists and formats for small enterprise management.

2. Scientific Poultry Production: A Unique Encyclopedia

P.V. Sreenivasaiah (2006), 3rd edition
1,487 pages; Rs 1,964
IBH Prakashana, Bangalore.

Tracing how poultry farming got transformed from a backyard hobby to a business enterprise, the book provides a detailed account of poultry science for the practitioner to augment the growth of the industry. It focuses specifically on the broiler and the layer industries that are growing at an estimated rate of 10 and 15%, respectively. It provides specific guidance on disease control, bio-security and basic farm technologies as coping mechanisms to deal with the spread of Avian influenza. It also provides information on the emergent area of the use of enzymes, performance enhancers, and other means for maximizing returns. The book points to the need to bring about a change in attitude of managers by giving importance to welfare and environmental concerns as well.

3. Poultry

G.C. Banerjee (2004)
199 pages; Rs 145
India Book House Pvt. Ltd., Delhi

An answer to the poultry farmer's needs for the latest technical know-how that will enable him/her to secure maximum profit with minimum investment, the book was first published in 1976, and since then it has been revised twice. In this third edition, information on farming of duck and quail has been incorporated. Care of chicken during summer and monsoon has also been

dealt with in detail. The book provides educational concepts, and a self-study guide for students, researchers, teachers, livestock extension specialists and administrators interested in the study of this sector, which contributes Rs 1,500 crores approximately to the GNP of the country and employs over half a million people.

Beehive products, diseases and enemies, beekeeping and ancillary industries, information sources, and strategies. The book is useful those interested in bees and beekeeping as a hobby or a profession. It details the scientific and efficient management of colonies for honey production and pollination.

3. Resource Institutions

1. The All India Artisans and Craft Workers Welfare Association (AIACA)

18 Community Centre, 3rd Floor
East of Kailash, New Delhi 110065, India
Tel: +91 11-26416492/93/94
E-mail: contact@aiacaonline.org,
Website: www.aiacaonline.org/

AIACA's objective is to ensure growth and continued vibrancy of the Indian handloom and handicraft sector. It brings together leading private businesses and non-profit organizations to investigate market-led, commercially sustainable approaches to help crafts producers. AIACA's members (as of 2010) total more than 76 organizations from across India, representing approximately 70,000 rural craft workers. As a result of the collaborative efforts of these members, AIACA has had considerable success in improving the lives of Indian artisans.

2. Kala Raksha

Parkar Vas, Sumrasar Sheikh
Taluka Bhuj, Kutch 370001, Gujarat, India
Tel: +91 2808-277237/38
E-mail: info@kala-raksha.org
Website: www.kala-raksha.org

Kala Raksha is a non-profit organization in Kutch, Gujarat, with for the following objectives: a) to preserve and present traditional arts, b) to encourage innovation within tradition, c) to assist in the achievement of self sufficiency, d) to provide basic education, and e) to enable the sale of contemporary arts. Kala Raksha Vidhyalaya, an institution of design for traditional artisans, provides the appropriate environment and methodology for them. The aim is to raise the value of hand-made work, which will ultimately ensure the preservation of traditional arts.

Kala Raksha began its work with 20 suf embroiderers, who had migrated to Kutch from Sindh. Within a decade, this small group grew to over 500 women from seven different communities, all traditional artisans from relatively marginalized populations. In each community, Kala Raksha first forms a group, based on mutual responsibility. Artisans come to the centre for workshops and meetings. Trained staff members, selected from the artisan communities, connect the artisans to the Trust through income-generation activities. Earning

is empowerment; more so because artisans price their own work and operate savings groups. Members have used income and instant loans for building homes, celebrating weddings, and purchasing sewing machines.

3. Shrujan

Behind GEB Sub-station, Post Bhujodi,
Bhuj, Kutch 370020, Gujarat, India
Tel: +91 2832-240272/241903/394360
Website: www.shrujan.org

Shrujan is a not-for profit trust that promotes exquisite hand embroidery of the poor artisan women in Kutch. It believes that self-sufficiency, confidence and dignity are the rights of women all over the world, and that unnatural divides of caste and communities can and must be overcome. Income generated through sale of hand-made products of the women is returned to the project. The organizational structure ensures personal and economic support to them. Shrujan provides all the material inputs and pays the women immediately on completion of each piece of embroidery. As far as possible, responsibility for production is delegated to village women called entrepreneurs, who have been trained in organisational and business skills. If the work-load warrants it, an entrepreneur may delegate work to a sub-entrepreneur. This structure ensures that, at the village level, management is always evolving, with training and responsibility is passed on to younger women.

Since 1969, Shrujan has trained over 18,000 women in embroidery, small business management or, both. Providing to women regular income has had far-reaching benefits. Economic empowerment has transformed them into confident and competent business women. They can invest in land, afford good health care, and provide better nutrition to their families. National recognition of their work affords them enormous respect within their communities. Shrujan also engages in community welfare activities like organizing cattle camps and health camps, and relief during natural disasters like earthquake and cyclone.

4. Kutch Mahila Vikas Sangathan (KMVS)

173/5B Satyam Shivam Sundaram, Jalaram Society, Opp. Santosh Tower
Hospital Road, Bhuj, Kutch 370001, Gujarat, India
Tel: +91 2832-222124
E-mail: kmvskutch@gmail.com

KMVS is a collective of rural women from 130 villages of Kutch, striving for socio-economic and political empowerment. Of around 4,000 KMVS members, 1,200 are traditional craftswomen, who have come together to form

self-sustaining producer groups. Thanks to their sustained efforts over the last decade, these women have helped each other, their families and communities extricate themselves from a vicious downward spiral of commercial exploitation by middlemen and traders.

Their products brand name is Qasab (meaning 'craft skill' in Kutchi). These women entrepreneurs have now reclaimed their roles as artisans and producers, by procuring better quality and cheaper raw material through collective bargaining, using better and contemporary designs, and have realized better prices through collective marketing.

5. Sadhna

c/o Seva Mandir, Old Fatehpura
Udaipur 313004, Rajasthan, India
E-mail: info@sevamandir.org, sadhna@sevamandir.org
Websites: www.sadhna.org, www.sevamandir.org

Sadhna is a women's handicraft enterprise registered under the Mutual Benefit Trust in 2004. It began as an income-generation project in 1988 under Seva Mandir, a developmental organization in Udaipur, Rajasthan. The project was started with the aim of providing an alternative means of livelihood and income augmentation for the women of rural, tribal, and urban slums in the Udaipur region. Starting with a small group of 15 women, who were trained in the skill of appliqué and embroidery, Sadhna family grew to 625 women artisans by 2009. All of them are owner members of the organization. They have their representation at various levels of decision-making in the organization. They are also shareholders of the annual surplus that is generated by the company.

6. Karigar

Asha Handicrafts Association, 24 ABCD Government Industrial Estate
Charkop, Kandivilli (West), Mumbai 400 067, India
Tel: +91 022-61545353
Mob: +91 9820449036/919867425957
E-mail: ulrich@karigar.in
Website: www.karigar.in

Karigar (meaning artisan) is the name of Asha Handicrafts Association's retail arm. Asha Handicrafts is an accredited member of the International Fair Trade Association (IFTA). Through its fair trade activities, Asha Handicrafts ensures that the benefits of handicrafts production reach the craftspersons directly. The profits of the organization are ploughed back into fair wages, design and

development, capacity building, training in crafts, education assistance for artisans' children, empowerment of women, medical facilities, financial, and marketing assistance. Karigar's retail store displays exclusive handcrafted traditional arts and objects with a touch of contemporary textile art of Kalamkari from Andhra Pradesh, home furnishings in Warli art and Bidri from Maharashtra, silver artifacts from Rajasthan, and traditional hand embroidery from Kutch, among others.

7. Udyogini

A-36, 2nd Floor, Gulmohar Park
New Delhi 110049, India
Tel: +91 11-41651175
E-mail: mail@udyogini.org
Website: www.udyogini.org

Udyogini (meaning woman entrepreneur) works with poor women to improve their skills as producers and their knowledge of the markets they operate in, so as to ensure long-term returns. Udyogini's vision and perspective on micro-enterprises for women have always been to empower women to understand and participate in critical enterprise processes. As the market gains prominence, the need for women to become knowledgeable and confident become critical to be able to lead enterprises. Udyogini strives to establish theory and practice for women's micro-enterprises through innovative interventions. The knowledge gained is shared with other agencies and social entrepreneurs through its outreach and training activities.

8. Marketing and Research Team (MART)

A 32, Sector 17,
NOIDA 201301, Uttar Pradesh, India
Tel: +91 120-2512140
E-mail: kirtimishra@martrural.com
Website:www.martrural.com

Established in 1993, MART is a pioneer in the rural domain. Over the years, it has emerged as a leading consultancy and knowledge-based organization on market-led interventions. MART's expertise lies in its understanding of the Base of the Pyramid (BoP) segments, their eco-system, and behaviour—an understanding that has been built over years of interaction and engagement with rural as well as urban low-income communities; an understanding that is constantly being revitalized and renewed as the emerging markets evolve in an ever-so-dynamic manner. Emerging markets are as much about unchanging

traditions as about changing lifestyles and evolving value systems. In such a dynamic environment, MART provides its clients with accurate, insightful, and contemporary knowledge.

MART conducted a comprehensive study for Assam Rural Infrastructure and Agricultural Services Project (ARIASP), a World Bank-funded project in Assam, to develop a strategy to strengthen existing *haats* as wholesale markets, in order to enhance the marginal farmer's access to the market. MART studied 20 *haats* in five districts through a qualitative approach. The study had two components; the first was to identify needs and develop an approach for strengthening *haats*, and the second was to explore and understand the type, design and cost of various infrastructures.

9. Consortium of Women Entrepreneurs International (CWEI)

1204 Rohit House, 3 Tolstoy Marg
New Delhi 110001, India
Tel: +91 11-20547255, 23356030
E-mail: cwei_mail@reddiffmail.com, shashwat_mail@yahoo.co.in
Website: http://www.cwei.org

CWEI is a registered civil society organization that works for the economic empowerment of women nationally and internationally. CWEI acts as a springboard for entrepreneurship, facilitates technology transfer, improves access to natural resources, product and design development, and explores marketing linkages within and outside the country through various *haats*, buyer-seller meets, exhibitions and fairs in India and abroad. It acts as a catalyst, providing all escort services leading to higher productivity, competitive prices, and stringent quality control for export.

CWEI helps in achieving e-commerce through its global information transformation system and with its web portal. E-commerce refers to the selling of products and services online. CWEI also facilitates representation in various government policy-making bodies for the promotion of export from India. It facilitates the dissemination of timely information, and the implementation and monitoring of government policies, schemes, and programmes.

10. Entrepreneurship Development Institute of India (EDI)

Via Ahmedabad Airport & Indira Bridge, P.O. Bhat
Gandhinagar 382428, Gujarat, India
Tel: +91 79-23969151, 23969153
E-mail: ediindiaad1@sancharnet.in
Website: www.ediindia.org

EDI, an autonomous body and not-for-profit institution set up in 1983, is sponsored by apex financial institutions, namely, the IDBI Bank Ltd, IFCI Ltd., ICICI Ltd. and State Bank of India (SBI). EDI is a national resource institution committed to promote entrepreneurship through education, research, training, and institution building.

EDI's Centre for Social Entrepreneurship

The Centre's primary aim is to bring about social well-being by implementing activities targeted at one or more problems in society. The centre functions as a full-fledged entity, completely devoted to social entrepreneurship. It has activities that bring about social change despite odds. EDI invites organizations and corporate houses to set up such centres at EDI, which will monitor the formulation of activities and their implementation, thus ensuring maximum reach.

11. The Livelihood School

Basix, 3rd Floor, Surabhi Arcade, Bank Street
Koti, Hyderabad -500001, Andhra Pradesh, India
Tel: +91 40-30512500/01
E-mail: ho@tls.org.in, ho@thelivelihoodschool.org
Website: www.thelivelihoodschool.in

The Livelihood School is an academic institution promoted by the BASIX group, a livelihoods promotion institution. The mandate of the school is to build up a knowledge base on livelihoods, and disseminate the same to livelihood practitioners for enhancing their understanding and implementation capabilities. These practitioners will, in turn, promote a large number of livelihoods.

12. Federation of South India Producer Associations (SIPA)

9 H.D. Raja Street, Eldams Road
Chennai 600018, India
Tel: +91 44-2435 2313/2435 3084
E-mail: sipa@vsnl.com
Website: www.sipa.in

SIPA is an initiative of the needy and interested artisan groups and their support organizations—voluntary organizations (NGOs), producer cooperatives and SHG networks—in South India involved in trade. Initiated in 1986, SIPA works with over 7,000 skilled artisans with a large number of women artisan groups, spread over the southern states.

Actively involved in product-development, market promotion and consortium

exports, SIPA also specializes in training/support in capacity-building, skill-enhancement—both for the artisan members and the support teams in their organizations—and actively promotes networking for 'Learning by Sharing'.

SIPA practices fair trade, as part of social commitment to its stakeholders, and promotes globally accepted fair trade standards, both in production and marketing.

13. Mother Earth

Industree
No. 84, 16th C Main, 4th Block
Koramangala, Bangalore 560034, India
Tel:+91 80-65472292
E-mail: info@motherearth.co.in
Websites: www.motherearth.co.in, www.industreecrafts.com,
www.indurstreecrafts.org

Bangalore-based Mother Earth (earlier known as Industree) is a design-led, craft-based company that has been working with natural fibres for over 15 years in retail and in exports. It works with a large base of rural artisans, designing, developing, and marketing a wide range of furniture and home accessories hand-crafted in natural fibre. It markets its products through its own stores—one each in Delhi, Kolkata, and Bangalore—and also through major retailers in India such as Home Town, Home Stop, Central, and Landmark. Its aim is to work with crafts-people in a self-sustainable fashion—marketing rural skills to urban markets. It is in the process of scaling up and broadening its product offering to include garments (woven, embellished or stitched by SHGs or rural artisans), food (organic and natural) and a wider range of home linen apart from a range of natural fibre products, and a large range of handicraft decor, furniture and gift items.

14. Self-Employed Women's Association-Lucknow (SEWA-Lucknow)

474/1KA/4 Brahm Nagar, Sitapur Road
Lucknow 226007, Uttar Pradesh, India
Tel: +91 522-2743259
E-mail: sewa_lko@rediffmail.com, sewa_lko@sify.com
Website: www.sewalucknow.org.in

SEWA-Lucknow is an autonomous organization of chikan artisans. In 1984, thirty-one women came together to register an organization of women artisans for 'chikan kari' under the 1860 Society's Registration Act. SEWA-Lucknow was thus formed with the main intentions of doing away with middlemen and

providing a platform from which artisans could address the market directly. After many efforts over several years, SEWA-Lucknow has been able to revive this craft by bringing in product variations, with continuing changes in designs, which have created interest in the buyer, thereby, finally, giving a new lease of life to this dying product.

15. Sandhi Craft Foundation

8 Amtoobai Blocks, 170/D Hill Road,
Bandra (W), Mumbai 400050, India
Tel: +91 22-26425302
E-mail: info@sandhifoundation.org
Website: www.sandhifoundation.org

Sandhi in Sanskrit means 'bridge'. Sandhi's mission is to develop sustainable livelihood opportunities for unorganized producers of handcrafted products by providing the missing pieces that help make the connection with markets. This includes handholding on everyday marketing and supply-chain related issues as well as longer-term assistance to build competitive advantage. Sandhi is a social enterprise that combines the agility and dynamism of private enterprise with a commitment to deliver long-term social values. It hopes to change the way the unorganized sector is perceived by markets.

16. Friends of Women's World Banking-India (FWWB-I)

101, Sakar- I Building, Opp. Gandhigram Station
Ashram Road, Ahmedabad 380009, India
Tel: +91 79-26580119/26584199/26584082/26584002
E-mail: fwwb@wilnetonline.net
Website: www.fwwbindia.org

The 1975 International Women's Conference in Mexico City, which brought together like-minded women leaders from across the world, culminated in the formation of the Women's World Banking (WWB) in 1980. The WWB was created to address the hitherto unmet needs of economically active but poor women's access to financial services thereby enabling them to engage in productive economic activities. In 1982, FWWB-I was created as one of the first few affiliates of WWB. Its activities include wholesale MF lending, capacity building, institutional support, research and documentation, livelihood and enterprise development (LEAD), networking and referral services, and social security initiatives.

17. IL&FS Cluster Development Initiative Limited

2nd Floor, Niryat Bhawan, Opp. Army Hospital Research & Referral
Rao Tula Ram Marg, New Delhi 110057, India
Tel: +91 11-46002200
E-mail: contact@ilfsclusters.com
Website: www.ilfsclusters.com

IL&FS clusters have been set up to leverage on the experience gained from design and execution of several programmes for the development of subject matter experts (SMEs) on cluster-based approach, in particular, the Tirupur Water Supply Programme. Set up as a strategic business unit in IL&FS in June 2005, IL&FS clusters initiated operations in April 2007 as a separate entity. In a short span of coming into operation, IL&FS clusters have developed a high degree of expertise in the development, implementation, financing, and management of cluster development initiatives across a wide range of sectors especially involving diverse and multiple stakeholders. Its vision is to provide commercially sustainable, integrated business, and institutional framework and solutions for development of micro, small, and medium enterprise (MSME) clusters on public-private partnership (PPP) basis, which will enable them to become globally competitive.

18 SASHA-Sasha Association for Craft Producers

Enterprise Development Foundation (EDF)
1C, Chatubabu Lane, Kolkata 700014, India
Tel: +91 33-22449761/9776
E-mail: edf@sashaworld.com/ sashaindia@vsnl.net/ sashaexport@vsnl.net
Website: www.sashaworld.com

Sarba Shanti Ayog¬ (SASHA) was started in 1978, primarily to provide marketing assistance to crafts-persons all over India. The design and development of products and organizations is another key activity. Twenty-five years after its inception, SASHA was working with more than 150 producer groups and communities. SASHA has promoted the EDF to formalize the work it has been doing so far, and to provide a more structured platform and support system for entrepreneurial initiatives at the grassroots.

19. FabIndia

FabIndia Overseas Pvt. Ltd.
B-53, Okhla Industrial Area, Phase-1
New Delhi -110020, India
Tel: +91 11-40692000,
E-mail: mailus@fabindia.net
Website: www.fabindia.com

FabIndia is a private enterprise that supports craft traditions of India by providing a market, and thereby encouraging and sustaining rural employment. FabIndia sources its products from over 40,000 crafts-persons and artisans across India. FabIndia has a national network of over 110 retail outlets in the major cities of India, in addition to international stores in Dubai, Bahrain, Doha, and Rome.

20. National Livelihood Resources Institute (NLRI)

Village Bhadrawasa, Mhow Neemuch Road
Ratlam 457001, Madhya Pradesh, India
Tel: +91 7414-272365, 272367
Mob: 09425927313
E-mail: head@nlri-gvt.ac.in
Website: www.nlri-gvt.ac.in

NLRI is an initiative of the Gramin Vikas Trust (GVT) a not-for-profit development organization promoted by Krishak Bharati Cooperative Limited and Department of International Development (DFID), UK, to implement large rainfed farming projects in both eastern and western regions of the country. GVT has, in the past 15 years, successfully implemented several projects influencing rural livelihoods in more than 1,200 villages in eight states, namely, Madhya Pradesh, Gujarat, Rajasthan, Chhattisgarh, Jharkhand, Bihar, Orissa, and West Bengal. Drawing on its rich experience and knowledge base, the NLRI carries out a variety of training programmes on livelihood augmentation activities.

21. Sa-Dhan

12 & 13, 2nd Floor, MPTCD Building, Special Institutional Area,
Shaheed Jeet Singh Marg, New Delhi 110067, India
Tel: +91 11-47174400
E-mail: info@sa-dhan.org
Website: www.sa-dhan.org

Sa-Dhan's mission is to build community development finance in India, and help its member and associate institutions to serve low-income households,

particularly women, in rural and urban India, in their quest for establishing stable livelihoods, and improving the quality of life. It was founded as the Association of Community Development Finance Institutions by SEWA Bank, BASIX, Dhan Foundation, FWWB, MYRADA, RGVN, SHARE, and PRADAN in 1999.

22. Development Alternatives (DA)

111/9-Z, Kishangarh, Vasant Kunj,
New Delhi 110070, India
Tel: +91 11-26134103, 26890380
E-mail: tara@devalt.org
Website: www.devalt.org

DA is a non-profit organization established in 1983. Its main focus is on creating large-scale sustainable livelihoods. DA works with partners in all sectors: government, international agencies, public and private sector institutions and grass roots voluntary organizations. The responsibility for providing support to such partnerships lies with the respective functional units of the DA Group. Supporting field projects aimed at livelihood augmentation and environmental protection, DA is one of the better known training institutions in the developmental sector.

23. Society for Research and Initiatives for Sustainable Technologies (SRISTI)

AES Boys Hostel Campus, Nr. University Library,
Navrangapura, Ahmedabad 380009, Gujarat, India
Tel: +91 79-27912792, 27913293
E-mail: info@sristi.org
Website: www.sristi.org

SRISTI, meaning 'creation', was born in 1993, essentially to support the activities of the Honey Bee Network and to respect, recognize and reward creativity at the grass roots. SRISTI is a registered charitable organization, devoted to empowering knowledge-rich economically poor people by adding value to their contemporary creativity. More recently, SRISTI has been focusing more on concerted ways of exploring neglected domains such as women's knowledge systems, value addition through a natural product laboratory, and innovations in education.

The success of the Honey Bee Network and SRISTI led to the scaling up of its activities at the national level in the form of National Innovation Foundation (NIF). The NIF is supported by the Department of Science and Technology and organizes national-level competitions for scouting grass-roots innovations on a bi-annual basis. The SRISTI-NIF database can be accessed on its website,

and has over one lakh entries of innovative solutions in diverse fields of crop improvement, crop protection, livestock management, farm equipment, etc.

24. Grassroots Innovations Augmentation Network (GIAN)

Bungalow No. 1, Satellite Complex, Nr. Satellite Tower, Mansi Cross Road
Premchand Nagar Road, Satellite, Ahmedabad 380015, Gujarat, India
Tel: +91 79-26769686
E-mail: gian@gian.org
Website: www.gian.org

GIAN is India's first technology business focused on incubating and commercializing grassroots innovations. Grassroots innovations are essentially solutions generated by people at the grassroots levels to tide over persistent problems—solutions that are either not available or not affordable by a large section of the consumer masses in developing countries.

These innovations, therefore, capture an unmet need of a large section of the population. Building a value chain around these innovations to take them to the market holds the potential of wealth creation in a truly sustainable and equitable manner. GIAN's mission is to build value chains around these innovations with the end-objective of making them available to the masses through the market mechanisms or otherwise. GIAN was established in Gujarat in 1997 with support from the state government. Since then, similar organizations have been established to cover different parts of the country.

25. International Centre for Entrepreneurship & Career Development (ICECD)

E-1/41, Sterling City, Bopal, Ahmedabad 380058, Gujarat, India
Tel: +91 2717-230039, 230059, 230082
Mob: 09909009770/71
E-mail: icecd2008@gmail.com/ icecdindia@gmail.com
Website: www.icecd.org

ICECD has been the vanguard of micro, small, and medium enterprises (MSME) development amongst varying target groups and has worked extensively around the globe, keeping gender issues in sharp focus. It has consistently striven to increase access/control of the poor on productive resources and facilities.

The Centre's first task was to train women for economic activities, thus starting the process of empowerment, and influencing the national policy for their development. At one time, it was the only organization in India catering to the multi-faceted needs of training women in enabling them to set up

MSMEs. ICECD has, so far, trained over 13,000 widows in Gujarat to become entrepreneurs.

26. Asian Centre for Entrepreneurial Initiatives, Bangalore (ASCENT)

No. 132, 11th Main, 17th Cross
Malleswaram, Bangalore 560055, India
Tel: 91 80-23346264
E-mail: ascent.bangalore@vsnl.com
Websites: www.ascentasia.org, www.toeholdindia.com

ASCENT is a social enterprise committed to fostering an entrepreneurial culture and wealth creation in the society. Therefore, ASCENT seeks to instill the spirit of enterprise, self-reliance, and self-help in individuals and organizations. It seeks to foster a sense of self-worth in people, especially among women, and to enhance the quality and effectiveness of an entrepreneurial venture. ASCENT has implemented a number of projects and programmes in the area of exports and group enterprises, for example, exports-led poverty reduction, organic food exports from farmers' groups, and training programmes on Exports Basics for NGOs.

Contemporary interventions for promoting micro-enterprise among poor women have tended to be gender exclusive in their approach, with women being producers, and NGOs being the exporters catering, by and large, to the sympathy and alternative markets. In contrast, the ToeHold Artisans Collaborative (TAC) provides an example of a successful group enterprise model in which women own and manage the export venture that has been co-created with men as co-entrepreneurs.

27. Vikas Bazar.net

Ms.Baladevi,
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IIIrd Floor, Rukmini Tower,
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Tel. 2284272
E-mail: baladevi@pradan.net, pawanojha@pradan.net

Vikas Bazar.net is a forum created to initiate a joint and coordinated effort by NGOs of Jharkhand for accelerating the participation of poor producers in the market for their benefit. The forum is the outcome of a workshop on "Poor, Livelihoods and Market Development" held in Ranchi in November 2005, organized by PRADAN and Badlao Foundation and supported by ICCO,

Netherlands. Although 54 NGOs attended the workshop about 14 of them took the lead to set up an informal network for collective action and mutual support. The initial months were concentrated on clarifying the objectives of the forum and establishing norms for functioning. A number of capacity building activities have been organized in the state in which over 50 NGOs have participated. Market studies have been initiated for three different sectors which hold promise for the poor to participate in the value chain. These studies were anchored by different members viz. BASIX (tomato), NEEDS (verimicompost), and SRI (bamboo). The findings were shared among network members and other interested NGOs. The secretariat of the network is housed in PRADAN, Ranchi.The Network is in the process of getting itself registered as a not for profit organization.

End-notes

The institutinos included in this list are based on our knowledge of the contribution they have made to this field. The authors are aware that there may be several other institutiuns doing equally valuable work and therefore this should not be taken as an exhaustive list.

4. About the Contributors

Contributing Institutions

AGROCEL

AGROCEL Industries Ltd.

Koday Char Rasta, Koday, Mandvi, Kutch District 370 460, Gujarat, India

Tel: +91-2834-295486/295448, Fax: +91-2834-275423/223838

E-mail: hasmukh.patel@agrocel.net, infosd@agrocel.net

AGROCEL Industries Ltd. was originally established in 1988 as a joint venture company of Excel Group of Companies and the Gujarat Agro Industries Corporation Ltd., and as an export-oriented pesticide company in the Kandla Free Trade Zone. It was infused with a new mission of serving the farmers of Kutch and other agriculturally backward regions of India in 1989-90. The company operates through two divisions, namely, Agriculture Service Division (ASD) and Marine Chemicals Division. The ASD with a mission to work for progressive, regenerative, and sustainable agriculture has established 16 rural service centres across India. These centres provide two kinds of services to the farmer — technical guidance and input supply, leasing of equipment, etc., all under one roof, and marketing support for organically grown produce through fair trade channels. The first is aimed at building up the value chain, beginning with the primary producers. The second is aimed at realizing better prices for the primary producer through better control over the value chain, and by linking up with clients with similar values.

PRADAN

Post Box No. 3827, 3, Community Shopping Centre,

Niti Bagh, New Delhi 110 049, India

Telfax: 011-26518619, 26514682 26528534, 41640611

E-mail: anish@pradan.net, headoffice@pradan.net

Professional Assistance for Development Action (PRADAN) is a non-government, non-profit organization that works with India's rural poor. As of 2009, over 265 professionals, divided into 30 teams, has been working with over 180,000 families across eight of the poorest states in the country. A majority of the families that PRADAN works with belong to the Schedule Tribes and Schedule Castes. The young professionals in PRADAN are recruited from universities, and hold specialized degrees in management, engineering, agriculture and the social sciences. PRADAN promotes SHGs, develops locally

suitable economic activities, mobilizes finances, and introduces systems to improve the livelihoods and sustain the progress of the rural poor. Established in Delhi in 1983, PRADAN was pioneered by a group of young professionals, who were inspired by the conviction that individuals with knowledge resources and empathy for the marginalized must work with communities at the grass roots in order to help them overcome poverty. PRADAN's co-founder, Deep Joshi, who spent the better part of his career nurturing, and guiding the organization and its programmes, received the Ramon Magsaysay Award for 2009.

Rangasutra

Rangasutra Pvt. Ltd

321 (II Floor), Old MB Road, Lado Sarai,

New Delhi 110 070, India, Tel: 011-41768270

E-mail:sumita@rangsutra.com, info@rangsutra.com

Rangsutra is a company of a thousand artisans from the remote regions of India — the deserts of Rajasthan, the hill regions of Uttaranchal, and Assam. Its goal is to ensure sustainable livelihoods for artisans and farmers by creating top quality handmade products, based on the principles of fair trade and there by celebrate India's rich craft heritage. Socially, crafts-people and artisans come from some of the most disadvantaged communities with very little opportunities for self-development and growth and given the fast changing trends in the urban market it is a miracle that artisans and crafts people have retained their skills.

Rangsutra is envisaged as a bridge between artisans and customers, tradition and the contemporary, change and continuity.

Community Friendly Movement (CFM)

L-76, Ist Floor, Lajpat Nagar - 2, New Delhi 110 024, India,

Tel: 011-29820053, Telefax: 011-29810476,

E-mail: info@whycfm.org, rahul@whycfm.org

CFM is a private company with social objectives, It is based in New Delhi and its mission is to create wealth for its primary stakeholders, namely, artisan communities at the bottom of the supply chain. It does so by offering quality handmade products to customers at competitive prices by working directly with the community to reduce the number of intermediaries in the chain. At present, CFM works with 20 artisan communities across India, and sells its products in India, USA, Europe, and UK.

BASIX

3rd Floor, Surabhi Arcade, Bank Street, Troop Bazaar, Koti
Hyderabad 500 001, India, Tel: 040-30512500/01
Fax: 040-30512502
E-mail: info@basixindia.com

BASIX is a livelihood promotion institution. It was established in 1996, and works with over a million and a half customers, over 90% being rural poor households and about 10% urban slum dwellers. BASIX works in over 10,000 villages in 15 states — Andhra Pradesh, Karnataka, Orissa, Jharkhand, Maharashtra, Madhya Pradesh, Tamil Nadu, Rajasthan, Bihar, Chhattisgarh, West Bengal, Delhi, Uttarakhand, Sikkim, and Assam. It has a staff of over 3,500, of which 80% are based in small towns and villages. BASIX's mission is to promote a large number of sustainable livelihoods, that includes rural poor and women, through provision of financial services and technical assistance in an integrated manner, and under one umbrella. BASIX strives to yield a competitive rate of return to its investors so as to be able to access mainstream capital and human resources on a continuous basis.

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Based in Ahmedabad, Pastakia works as a freelance consultant and academic in the fields of rural livelihood augmentation and natural resource management. His career spans a decade of grassroots experience followed by two decades of developmental academics. Pastakia who has done his Fellow Programme in Management from the Indian Institute of Management, Ahmedabad (IIMA), has a basic education in agricultural sciences. Prior to this, he has edited two books: *Locked Horns: Conflicts and their Resolution in Community Based Natural Resource Management* (2008) and *Farmer-led Participatory Research: Cases from Western India* (2002) with two others; both published by Books for Change, Bangalore. His research interests include innovations and entrepreneurship for sustainable development, ecopreneurship, common property resource management, sustainability of people's institutions and participatory natural resource management. He has published over a dozen papers in the international and national journals. His paper "Grassroots ecopreneurs: Change agents for a sustainable

society" in the *Journal of Organisational Change Management* (1989) received the Outstanding Paper of the Year Award from MCB University Press, London.

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Sachin Oza, is the Executive Director of Development Support Centre and has a Masters degree in Social Work. He has been with the voluntary sector for 20 years and has wide experience in the capacity building of functionaries of NGOs as well as government departments. He is a member of several policy making bodies at the state and national levels like the Expert Group for Formulation of the National policy on Voluntary Sector 2007, Expert Group for formulation of the Integrated Watershed Management Programme Guidelines 2008 and Expert Group for Implementation of MGNREGA on a Watershed Platform 2010. His main contribution has been in the area of promoting people's participation in natural resource management and institution development. He is also a consultant for World Bank and GTZ for projects related to NRM.

Project Coordinator

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Virendra Vaghani has done his Bachelor of Technology with specialization in Agricultural Engineering and is presently the Technical Expert in Watershed Management at Development Support Centre. He has eight years experience in the field of rural livelihoods and natural resource management and is involved in providing technical training to various stakeholders. He is responsible for curriculum development for various stakeholders. He also looks after project planning, coordination implementation and monitoring of DSC's initiatives in rainfed areas. He was part of the team for evaluation of various watershed development projects in Gujarat and Madhya Pradesh and involved in various assignments related to natural resource management.

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In India, close to 400 million poor reside in rural areas, most of them in rainfed areas. Scientific research has revealed a vast untapped potential in rainfed agriclulture where crop yields are lower than their potential by two to five folds. A large number of innovative projects and ideas have been tried to address this issue, although documentation has been uneven and fragmented. Drawing upon such experiences, the present handbook points towards new vistas and untapped opportunities in meeting the challenge of enhancing food security with limited water resources and improving the carrying capacities of rainfed areas to match the rapidly increasing population in these regions and elsewhere.

The handbook is presented in four volumes under a common framework. Each volume presents a selection of best practices, articulation of basic principles, and description of strategies that are known to work on the ground.

Volume I describes natural resource based strategies such as watershed development, community forestry, lift irrigation, animal husbandry, wasteland development etc.

Volume II deals with market-led interventions, such as addressing market imperfections, creating market opportunities, and building pro-poor value chains.

Volume III focuses on ICT enabled strategies such as plot specific farm advisories, market intelligence services, inclusive finance, and opportunities like rural BPO in the emerging ICT led service sector.

Volume IV dwells upon the difficult task of building the capacity of rural communities to implement livelihood projects and maintain productive assets. Social capital building is a crosscutting theme for all developmental interventions because it helps empower the people to take charge of their own developmental trajectories.

dsc
Development
Support
Centre

AGA KHAN FOUNDATION

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About DSC

Established in 1994, Development Support Centre provides knowledge based support to community based organizations, non-government organizations and government functionaries. DSC helps in capacity building of key functionaries in rural development, performs hand holding operations in the field, takes initiatives for policy changes, and carries out field studies and research projects related to issues in policy and practice. It directly implements key projects in more than 200 villages in rainfed and irrigated areas across two states i.e. Gujarat and Madhya Pradesh.

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