



HARVESTING OPPORTUNITIES

IMPROVING SMALL AND MARGINAL FARMER LIVELIHOODS



In Sanskrit, Dasra means Enlightened Giving.

Dasra is India's leading strategic philanthropy foundation. Dasra works with philanthropists and successful social entrepreneurs to bring together knowledge, funding and people as a catalyst for social change. We ensure that strategic funding and capacity building skills reach non profit organizations and social businesses to have the greatest impact on the lives of people living in poverty.



The Godrej Group has been at the forefront of philanthropic activities for several decades. Business at Godrej is not just about profit as 25% shares of the Godrej Group's holding company are held in a trust that invests back in environment, healthcare and education. The Godrej Group has developed a long-term vision named 'Godrej Good & Green' which will play an active part in creating a more inclusive and green India. As part of Good & Green, the Group aspires by 2020, to create a more employable Indian workforce, a greener India and innovate good and green products. Specifically, the goals as part of this vision are:

- Training 1 million rural and urban youth in skilled employment
- Achieving zero waste to landfill, carbon neutrality, positive water balance, energy reduction and using renewable energy sources
- Having a third of revenues comprising of products that are environmentally superior or address a critical social issue for consumers at the bottom of the income pyramid

Table of Contents

● Executive Summary	4
● Research Objectives	6
1. The State of Agriculture in India	8
The agriculture value chain, Challenges in Agriculture and the evolution of Agriculture in India	8
2. An Uneven Field- Grassroots Challenges to Improving Small Farmer Livelihoods	18
Findings from Dasra's survey of social organizations	18
3. Structural Innovation to Improve Small and Marginal Farmer Livelihoods	28
Producer Companies: The role and benefits of farmer based organizations	28
4. Case Studies on Producer Companies	36
Uday Agriculture Producers Ltd Co.	36
Dharani FaAm Co	39
Vasundhara Agri Horti Producer Company Ltd. (VAPCOL)	42
Koutla-B Mutually Aided Cooperative Society (MACS)	45
5. Concluding Thoughts	49
● Appendices	
A. Dasra Research Process	51
B. Glossary	52
C. Bibliography	53
D. Acknowledgements and Organization Database	55
E. Endnotes	56



Photo: Mandeshi

Executive Summary

Agriculture in India requires urgent intervention. As India emerges on the global playing field, one of the mainstays of its economy, agriculture, poses some of the biggest challenges to achieving inclusive growth.

Agriculture's performance has been fluctuating across the Five Year Plan periods. While the sector growth rate was 4.8% during the Eighth Plan period (1992–97), it declined to 2.5% and 2.4% respectively during the Ninth (1997–2002) and the Tenth Plan periods (2002–07). In contrast, the growth rate for the economy stood at 7.6% during the Tenth Plan. While close to half of India's 1.2 billion people are dependent on agriculture for their livelihoods, the sector itself accounted for less than 15% of GDP in 2011-2012 compared to 30% in 1990-91. Even the share of agricultural investment within total investment has been falling since the 1980s.

The diminishing focus on the sector is mainly because agriculture is no longer considered a viable livelihood option. Although agriculture is the largest employment generator and provides food security to the entire country, 86.1% of farm households earn less than US\$1/day per capita. These households represent a growing group of small and marginal farmers living in abject poverty and dependent on agriculture for their sustenance and livelihood.

The challenges faced by small farmers are numerous ranging from fragmentation of land to lack of market linkages and extension services. According to the National Sample Survey Office, while in 1961 the average land holding size was 2.63 hectares, in 2003 it stood at 1.06 hectares. The trend is worrying as most small producers in India who own less than an acre of land cannot produce enough to sustain the average family size of 5.5.

Additionally, an acute shortage of accessible and affordable infrastructure for irrigation, storage, transportation and extension services makes it difficult for farmers to access markets effectively and efficiently. In fact, according to Dasra's survey, a third of the organizations working with small farmers listed insufficient extension services as one of the top three challenges faced by farmers apart from erratic natural conditions (such as drought and heavy rainfalls) and lack of market linkages.

Lack of inputs such as finance, irrigation and skilled labor also pose a big challenge for small farmers. While around 48.6% farmers are indebted to formal or non-formal lenders, around 51% of them are excluded from formal lending. Inability to repay debts at exorbitant rates has led to farmer suicides in the past and the threat still looms large.

Farmers also face difficulties in selling their produce at the best price in India's largely state-controlled agricultural markets. The Agricultural Produce Market Committee (APMC) Act was introduced to support farmers but in practice has introduced monopolies and barriers to entry that prevent the effective functioning of markets.

Sociocultural aspects add to the problems. With globalization and technology advances, aspirations in rural areas have changed and farming is often being viewed as an unattractive option. Further, women are failing to reap the full benefits of their role in agriculture as their work is still under-valued. Even though they carry a heavier burden in food production, they receive lower returns. Lastly, lack of education among farmers makes it difficult for them to avail of schemes and extension services and also strengthen their own skills.

Although most solutions to India's agricultural malaise are capital-intensive and large-scale in nature involving the private sector and the government, innovations at the grassroots can benefit farmers considerably. The formation of producer groups or farmer-run organizations came up as the single biggest intervention that could alleviate conditions of the small producers. Almost 30% of the organizations in Dasra's survey felt the need for corporates to engage with producer groups – companies owned and professionally managed by farmers – to create economies of scale and provide market linkages.

Executive Summary

Most of the organizations surveyed by Dasra felt that there was a need for the government to target specific policies such as leasing of agricultural land and doing away with the APMC Act followed by the provision of extension services and private investment in supply chain coordination. From an organizational point of view, lack of funding came across as the biggest challenge faced by the organizations surveyed; almost half of the respondents felt that erratic funding is a big concern for them.

Non-profits traditionally have been extremely active in implementing rural development programs that have empowered significant numbers of farmers. However, they have lacked the requisite scale to produce a long-term impact. Dasra's case studies on four producer companies, Uday Agriculture Producers Ltd Co., Dharani FaAm Co, Vasundhara Agri Horti Producer Company Ltd. and Koutla-BMACS highlights how the formation of producer companies, a relatively newer approach to improving small farmer livelihoods, aids aggregation and post-harvest value addition, as well as capacity building of farmers, increasing their bargaining power and creating market linkages.

Bringing together the key players – farmers, extension service providers, researchers, non-profits, social businesses, private sector and the government – could better realize the potential of this approach. This report identifies a number of investment needs and opportunities within agriculture such as extension services, inputs (irrigation, finance, pesticides, fertilizers, etc.), infrastructure, and improved farm-to-fork connectivity – best channeled through the producer organizations. Dasra's research found that, at the grassroots, there is an urgent need to invest in business model creation and capacity building for small farmers so that they are able to achieve sustainability.

The chart below depicts five areas of interventions and the degree of priority given by the four producer groups researched by Dasra:

	UDAY AGRI	DHARANI	KOUTLA MACHS	VAPCOL
Scale of Operations				
Aggregation and post-harvest value addition				
Capacity building of famers				
Creating Market Linkages				
Women Empowerment				

The focus areas for the four producer groups at the time of field visit

-  High Focus Area
-  Medium Focus Area
-  Low Focus Area

In view of the findings, Dasra recommends that philanthropy can be the best targeted towards supporting producer groups. This would create systemic impact at scale with respect to reaching out to farmers and building on the ecosystem.

Research Objectives

This research presents a comprehensive understanding of the agricultural landscape in India. It addresses the key challenges facing the sector and directs attention towards where results can be best achieved through philanthropic efforts. Below is an outline of the key areas mapped in this research:

- An overview of the Indian agricultural landscape and identification of key challenges
- A strategic overview of where philanthropy can be best targeted to alleviate the situation of small and marginal farmers
- An understanding of the agricultural value chain and a review of the situation of small and marginal farmers therein
- A presentation of 'voices from the grassroots' that deal with practical realities in order to address potential gaps
- Best practices within the sector through case studies on producer groups, farmer-based collectives



Photo: Mandeshi



Photo: Angan

The State of Agriculture in India



Photo: Angan

The Indian agricultural sector requires urgent attention and reform. According to the National Crimes Record Bureau, at least 14,027 farmers committed suicide in 2011. Since 1995 the number has touched 2 70,940 with Maharashtra topping the list¹. This may seem surprising considering that agriculture is India's largest employment generator and that India has a significant position in agriculture globally. Majority of India's population, 60%, is employed in agriculture and the sector provides food security to India's 1.2 billion people. Globally, India is the largest producer of some food items such as cashew nuts, coconut, tea, ginger, turmeric and black pepper, and the second largest producer of wheat, rice, sugar, groundnut and inland fish².

Agriculture's performance has been fluctuating across the Plan periods so while it witnessed a growth rate of 4.8% during the Eighth Plan period (1992–97), the growth rate dropped to 2.5% and 2.4% respectively during the Ninth (1997–2002) and the Tenth Plan periods (2002–07). Considering that the growth rate for the economy stood at 7.6% during the Tenth Plan, agriculture's viability in India is in question. While agriculture's contribution to GDP has declined steadily to less than 15% during 2011-12, from 30% in 1990–91³, the share of services rose from 41% to 54% over the same period. This means that 566 million farmers or half India's population earns less than a quarter of the nation's income!

An expanding services sector and a shrinking agriculture sector is a sign of economic development. But for inclusive development in India, the challenges described below require immediate attention by all stakeholders involved.

Considering the challenges Indian farmers face, their dire situation is not so surprising. These include numerous constraints to sustainable production and livelihoods and day-to-day challenges, resulting in poverty and low social and developmental indicators. The many constraints have slowed the rate of growth of agricultural employment, which was just 0.01% about five years ago and insignificant during the 1990s⁴. Indian agricultural trade flows have also been restricted to a relatively modest level compared to those of other countries.

The Agriculture Value Chain

The agriculture value chain is inherently linked to the crop under cultivation and the region of cultivation, and therefore not amenable to generalizations. Additionally, different actors influence various aspects of the value chain. While the role of small producers reduces as one moves along the value chain and that of private players become stronger in post-harvest activities, government's role remains an overarching one.

Dasra's interactions with experts and field visits to non-profits and producer companies has enabled us to present a simplified version of this value chain that captures the essence of agricultural activity from inputs to the plate.

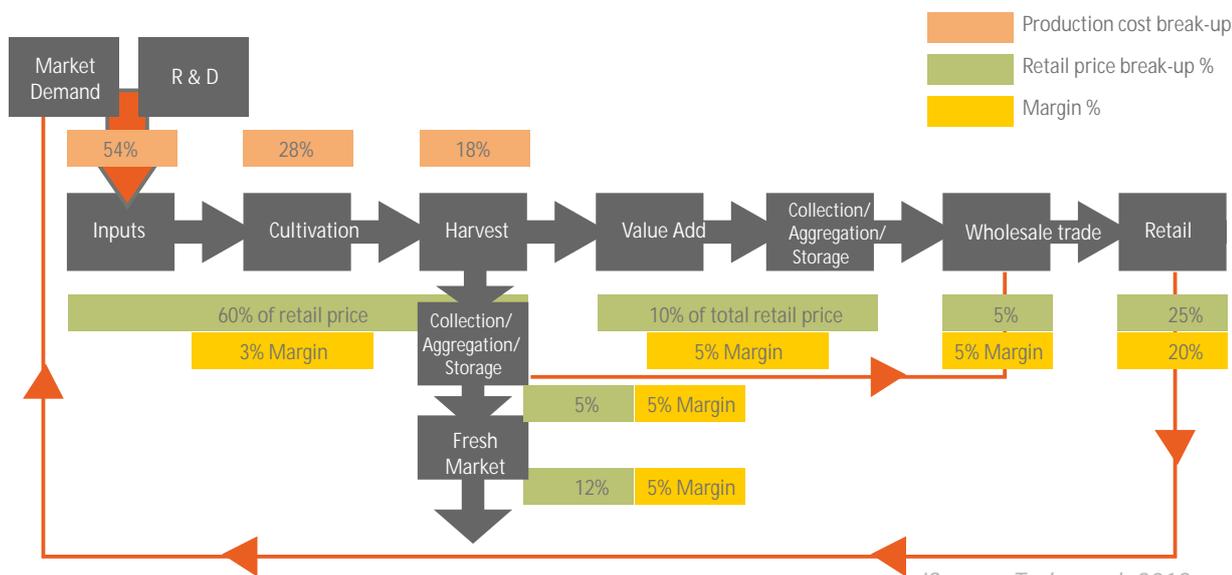
Chart below represents the value chain. Small and marginal farmers face several challenges at each stage.

The following table represents the margins that middlemen make through different stages of the agricultural value chain, the production cost breakup and the retail price breakup.



Photo: Manddeshi

Agricultural Value Chain for Wheat



'Source: Technopak, 2012



Photo: Angan

Though China continues to have a much lower average size of landholding than India, its agricultural productivity and growth are significantly higher than India's. Between 2000 and 2009, China recorded 4.4% annual growth in agriculture compared to 2.9% in India. Per hectare productivity of major crops in China is 6% to 190% higher than in India. This is because China has put a lot of effort into post-harvest management, primary processing, value addition and seamless value chains to ensure smallholders' effective participation. China's strategy of investing heavily in developing marketing infrastructure since the 1980s has enabled the active linkage of farmers to the value chain.

India is home to 127 million cultivators and their families spread across rural and peri-urban areas in 101.27 million operational land holdings. These cultivators are responsible for the production of over 200 million tonnes of food grain according to 2011 estimates by the Ministry of Agriculture.

Broadly farmers can be classified as follows, depending on the size of their landholdings and scale of their cultivation:

- Large Farmers account for 0.8% of landholdings with an average holding size of over 10 hectares and are the most well-off.
- Medium Farmers make up 13.5% of landholdings with an average plot size of 4-10 hectares and are reasonably well-off.
- Small and Marginal Farmers account for a massive 86.1% of landholdings that are below 2 hectares; this is a growing group of the worst-off farmers representing subsistence agricultural production in the country. According to the Food and Agricultural Organization (FAO), small-holders make up about half of the national population and comprise almost three-fifths of the nation's hungry and poor⁵.

Challenges in Indian Agriculture

With increasing population pressure in India, land is becoming increasingly fragmented. While in the 1960s, 61.7% of farmers were small and marginalized, in 2003, 86.1% fell into this category. At this small scale, the costs of cultivation are the highest. As a result, small and marginal farmers live in abject poverty where farming is no longer a viable livelihood option. The challenges mentioned below have actually deepened in this one and a half decade and are becoming more and more severe with the passage of time. Broadly these relate to growth in output, efficiency, equity and sustainability.

Darsa's research found that small farmers face many challenges on two levels: those specific to the nature and scale of cultivation and macro level barriers that constrain growth today.

1. Land Fragmentation, Insecurity and Productivity

Small and marginal farmers who make up around 80% of the total population actually operate on around 44% of the land available at present. In contrast, in 2002-2003 they contributed 51.2% to the country's total output⁶. The average size of land holding has been declining too; the National Sample Survey Office data shows that, while in 1961 the average land holding size was 2.63 hectares, in 2003 it stood at 1.06 hectares.

Most small and marginalized farmers in India who own less than an acre of land cannot produce enough to sustain the average family size of 5.5. Since average plot sizes are not equipped for cultivation at scale, most farmers engage in complementary income generation activities: wage labor, animal husbandry, forestry, horticulture, plantation, logging, etc. Other farmers who rent land for cultivation face insecurity of landholdings and enter into informal agreements at exploitative rents. Unregistered cultivators, tenants and tribal cultivators all face difficulties in accessing institutional credit and other facilities available to farmers with land titles.

Agricultural production in India has been stagnant and, coupled with population increase and a decrease in area under cultivation, has led to a decline in the net per capita availability of food grains. This raises concerns about food security⁷ considering that the entire country's population is dependent on domestic production for its food. In fact, to combat this situation, some countries in Africa, e.g. Uganda, have tapped on companies to set up food processing units and contribute towards food security and transfer of technology in the region, with local employment generation.

2. Lack of Infrastructure and Investments

Existing infrastructure is inadequate to meet the needs of the farming population. There is an acute shortage of accessible and affordable infrastructure for irrigation, storage, transport and extension services mostly because these involve large initial capital investments, long gestation periods, a high incremental capital output ratio, high risk, and low returns on investments. In a survey conducted by Dasra, more than one third of the respondents felt that depleted soils, poor water supply and lack of modern equipment and facilities such as irrigation that are suitable to Indian conditions pose a significant challenge to productivity.

Investments in agriculture have largely followed a subsidy-driven model, with a newer wave of private investment being fairly recent. The efficiency and coverage of these subsidies has, however, been questionable. One view is that agricultural and food subsidies, at around ` 1.15 crore in 2008-09 that make up more than 10% of total subsidies in the country, are wasteful⁸.

But others feel that withdrawing subsidies could have an adverse impact on farm production and the income of small and marginal farmers tilling unirrigated areas (about 60%) as they do not benefit from higher output prices but do benefit from lower input prices⁹.



Photo: Saath



Photo: Manitham

With liberalization and the onset of globalization, there has been a decline in public investment in agriculture. Prior to globalization, India's food grain production was 3.5%; in the post-globalization period it fell to 1.7%¹⁰. One of the reasons is the reduction in subsidies for farmers, resulting in higher prices of food grains. Findings from our survey reveal that 74% of the organizations covered depended on government funding as a source of capital and one of the challenges they faced was ensuring a steady supply of funds.

3. Inadequate Inputs

One of the biggest challenges facing small and marginal farmers is an overall lack of access to the inputs that can boost farm production. These are:

Finance: Small and marginal holders have little access to institutional mechanisms so are dependent on money lenders for credit. An estimated 48.6% or 43.3 million households are indebted to formal or non-formal lenders and 27.8% have borrowed from formal sources (banks, self-help groups, etc.). This places a severe burden on farm households, who more often than not are servicing these loans at an exorbitant rate of interest and are thereby trapped in a vicious circle of indebtedness. A staggering 51% of farm households are completely excluded from the formal financial sector.

Irrigation: Indian agriculture is characterized by a high dependence on rainfall and 60% of farming categorized as 'highly risky' is rain-fed. Only 35% of agricultural land is irrigated, placing small and marginal farmers at a much larger risk as they are more dependent on ground and rain water than large farmers who have access to canals.

Skilled Labor: The farm sector suffers from a lack of skilled and motivated labor. With farming becoming an increasingly loss-making livelihood, building skills and knowledge is not only less of an aspiration but also increasingly unaffordable.

4. Poor Market Linkages

Over the past 50 years, agricultural markets in India have been considered imperfect as they are largely state controlled through the Agricultural Produce Market Committee (APMC) Act. Within this framework, states set up APMCs, which function as primarily wholesale markets or mandis. There are currently 7,161 regulated mandis across the country, where farmers can sell their products at fixed prices. While the APMC's aim was to protect farmers from price fluctuations and exploitation, it has proven to be a constraining market mechanism in an increasingly liberalized economy. Monopolies and barriers to entry have prevented the effective functioning of markets and establishment of a competitive marketing system. These problems are aggravated by the fact that there is limited infrastructure for storage and aggregation, costs of production are increasing, there are uncertainties in yields and margins from food crops are steadily declining. As a result of this, small and marginal farmers find it difficult to access free and fair markets with their produce.

Further, these farmers have to compete in a global market tilted towards farmers in developed countries who receive large subsidies and protection policies for agriculture. The agricultural subsidies given in the North cost around \$360 billion a year and have been a cause of the long-term global fall in commodity prices, which impacts the poor peasants who are integrated into the markets and pitted against strong agribusinesses¹¹. Already coping with low productivity, lack of post-harvest facilities and other infrastructural issues, poor farmers take on more debt to deal with high input prices and find themselves in a vicious debt trap¹².

5. Regional Diversity and Crop Variance

Though small and marginal farmers contribute higher output compared to their share of acreage across the country, there are significant regional variations in their contribution to output, ranging from 19% in Punjab to 86% in West Bengal. In the eastern states, the share of both area and output are high for small and marginal farmers. On the other hand, in some of the states in Central, Western and North-Western India, medium and large farmers still dominate in both acreage and output. Small and marginal farmers also make a larger contribution to the production of high-value crops; they account for 70% of the total production of vegetables, 55% of fruits, 52% of cereal production and 69% of milk production, thereby contributing to both diversification and food security¹³. Findings from Dasra's survey reveal that technical interventions such as improving soil health and intensifying cultivation methods were some of the biggest interventions undertaken by organizations engaged with small and marginal farmers.

Further, an increased dependence on fertilizers, modern outputs and intensive cultivation after the Green Revolution has created concerns about soil depletion. Since the multiple cropping index is much higher for small and marginal farmers compared to large ones, the nutrient balance in most soils in India has been deficient. This is primarily because nutrient removal by crops far exceed the nutrient additions through manures and fertilizers.

6. Socioeconomic Factors

With the advent of information and communication technology, globalization, increasing urbanization and a services-driven economy, aspirations in rural areas have changed, especially as agriculture is becoming increasingly unviable.

There are other sociocultural factors too that deepen the challenges within the sector. One instance is the feminization of agriculture. The contribution of women to overall farm production is around 55-66%¹⁴. Women mostly carry a heavier burden in food production but get lower returns on work compared to their male counterparts and, owing to the deep-rooted patriarchal systems across India, they are denied property rights, which means that legally they have no rights over the produce even if they are working on the land.

Despite being a productive workforce in cultivation, and sharing in family farm activity, women in agriculture are continuously inhibited from realizing their full productive potential. According to the Gates Foundation, women farmers can grow 30% more food if they have access to the same resources as men. Furthermore, helping women farmers boost production could save 150 million people globally from hunger.

An often neglected but very crucial factor for small and marginal farmers in operating effectively is education. The right education can enable them to avail of various government schemes and extension services and also strengthen their own skills. However, a lot needs to be done as currently half of those engaged in agriculture are still illiterate and just 5% have completed a higher secondary education.

Agriculture is a livelihood for many disadvantaged social groups and the proportion of disadvantaged groups such as Scheduled Castes and Tribes is higher, at 22% among small and marginal farmers, representing nearly a quarter of farmers in this category. Due to their inferior status within communities, these farmers are even more constrained than their counterparts as they have the lowest quality land, lack access to information, markets and credit, and suffer from discrimination in the delivery of public services.

Since smallholder agriculture is not viable for various reasons such as lack of market linkages and credit facility, and multiple middlemen, to name a few, the emphasis now is increasingly on non-farm activities to augment incomes – a phenomenon being replicated the world over. Almost three-fourths of small and marginal farmers fall below the poverty line if they do not supplement their income with non-farm activities¹⁵. An example of rural non-farm income alleviating the conditions of farmers is the government's flagship program, the National Rural Employment Guarantee Act (NREGA), which guarantees 100 days of wage employment to a rural household a year. This has been pivotal in improving farmer conditions and has helped ensure economic security for millions of households in poor rural regions¹⁶. So, while non-farm sources account for 40-45% of average rural household income in Sub-Saharan Africa and Latin America, it constitutes 30-40% in the South¹⁷. However, even these non-farm activities are unevenly distributed among poor farmers as relatively high-return activities are usually accessible to those with capital or skills, with low-return activities open to the poor¹⁸.

In view of the problems in agriculture described above, investments should have been directed at alleviating the situation of small and marginal farmers. Not only has this not been done, the share of agricultural investment in total investment has been falling since the 1980s. Although it picked up between 1999-2000 and 2002-03, since then agricultural investment as a proportion of GDP has been declining¹. This trend is mirrored in the global sentiment too. Globally, levels of overseas development assistance for agriculture were the highest during the 1980s², decreased from 1991 to 2002 and then increased in recent years, but have not returned to the levels observed in the 1980s. By some measures, donor commitments have not emphasized agriculture in areas with the highest rural poverty and greatest agricultural share of GDP (in Sub-Saharan Africa and India as well as the rest of South Asia).³

In such a situation, philanthropy has a critical role to play as risk-taking patient capital in supporting new business model development, proof of concepts and growing innovation in traditional nonprofit approaches to improving small farmer livelihoods.



Photo: Nature

The Evolution of Indian Agriculture

Prior to Independence and a little after, farmers would cultivate primarily for subsistence and any surplus would be traded. Under the British Raj a few Indian commercial crops such as indigo and opium were exported and, in the second half of the 19th century with some increase in land under cultivation, agricultural production increased by around 1% annually.

Concrete measures within agriculture started being drafted with the Five Year Plans. The period from the 1950s to 1960s, referred to as the 'pre-green revolution' phase, was marked by many agrarian reforms, institutional changes and development of major irrigation projects. Land Ceiling Acts were passed by all the states to eliminate large holdings and cooperative credit institutions were strengthened to minimize exploitation of cultivators by private money lenders and traders¹⁹. This phase in Indian agriculture coincided with global sentiments that also witnessed government intervention in the sector largely due to the World War II destruction.

In the early 1960s, India faced a massive food shortage, which propelled the government to foster the spread of new high yielding varieties of wheat and rice involving heavy use of fertilizers and irrigation. This marked the second phase of agriculture policy in the country. The Green Revolution produced quick results as there was a quantum jump in yield. Consequently, in the six years from 1966 to 1972 wheat and rice production increased by 30 million tonnes, 168 percent higher than the achievement of 15 years following 1950-51. The biggest achievement of the new agricultural strategy, also known as Green Revolution technology, was that India attained self-sufficiency in food grains. Even globally, state intervention was being seen as rent seeking and a distortion to efficient price signals. Since peasants could not respond to price changes in the 1970s and 1980s, the government's role was consequently "rolled back" in a nod to the Washington Consensus.

The Green Revolution led to an increase in farm incomes that led in turn to the emergence of interest groups and lobbies, which started influencing farm policy in the country. There was a considerable increase in subsidies and support to the agriculture sector during this period and, while public sector spending in agriculture for infrastructure development started declining, investments by farmers kept rising²⁰. Output growth was concentrated with a very few farmers, and the rural economy started a process of diversification which resulted in fast growth in non-food grain output such as milk, fishery, poultry, vegetables and fruits, which accelerated growth in agricultural GDP during the 1980s (ibid).

The 1990s heralded a new phase, with a policy shift towards delicensing and deregulation in industry. However, agriculture policy lacked direction. The government did not seem to have as clear a stand on agriculture as it had for industry²¹. Concurrently, the land holding per household was declining; there was a move away from food crops to cash crops for higher returns and with rapid urbanization and industrialization, agricultural land was being diverted to other commercial activities. A lack of clear incentives also drove some farmers out of the occupation; nearly 8 million cultivators quit farming between 1991 and 2001²².

In view of the developments described above, Indian agriculture witnessed a slump in production during the Ninth (1997-2002) and the Tenth Plan (2002-2007) with an annual growth rate of 2.5% and 2.4% respectively. This was down from the 4.8% growth witnessed during the Eighth Plan period (1992-97). Contrasted with the economic growth of 7.6% during the Tenth Plan, the bleak outlook in the agricultural sector was a huge concern for policy makers.



Photo: Mandeshi

An Uneven Field

Grassroots Challenges to Improving 'Small Farmer Livelihoods'



Photo: Manndeshi

To understand grassroots approaches to empowering small and marginal farmers, Dasra reviewed over 140 nonprofit organizations active in agriculture. Our research showed that nonprofit involvement has the following key characteristics:

- A holistic rural development perspective, intervening across the following themes: livelihoods improvement, food security, women's empowerment, rights and entitlements
- A typical focus on marginalized groups- small landholders, tribal groups, etc.
- Assistance in
 - a. Organizing producer groups that collectivize farmers
 - b. Procuring inputs such as seeds and fertilizers
 - c. Providing extension services to farmers

Typical nonprofit activity includes:

- Long-term community based support to farmer groups
- Promoting resource management
- Helping farmers build capacity to fund their farm enterprises efficiently
- Providing a knowledge and information base to farmers
- Setting up co-operatives and collectives

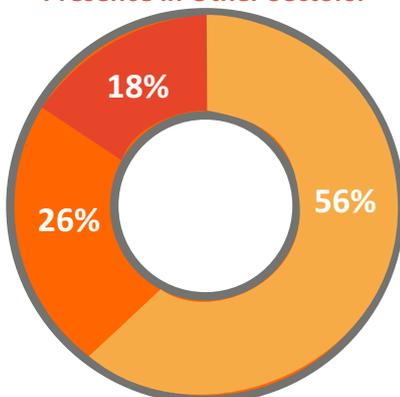
Nonprofits conducting research in agriculture are few and far between; this area is dominated by international Non-Governmental Organizations (NGOs), think tanks and technical agencies. While nonprofits typically brand and retail the produce of farmers and provide some market linkages to groups they work with, they do not actively aggregate produce from individual farmers on a large scale to provide market linkage, leaving a significant gap in farm-to-fork connectivity.

We reached out to some organizations through a survey to obtain a clear picture of their models and growth-related challenges. In all, 34 organizations participated in the survey, 30 non-profits and 4 social businesses. Our key findings are described below.

1. Presence in Other Sectors:

Most respondents (56%) were engaged in highly diversified sectors which include education, skill development and sanitation. Only 17% had limited their activities to a core agricultural activity and 27% organizations had diversified slightly into related sectors such as animal husbandry and rural development. Since Dasra's research relates to crops, there was a felt need for building specialization within organizations that can enable focused work with farmer groups for sustainable results.

Presence in Other Sectors:

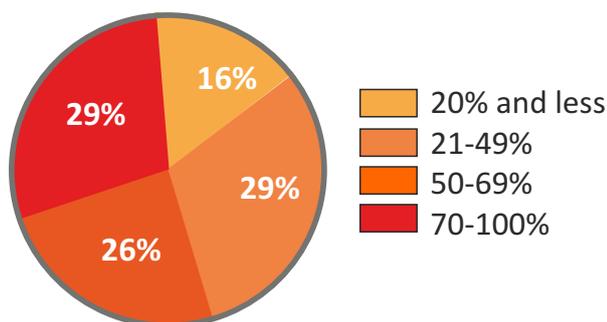


- Highly diversified
- Medium diversified
- Low diversified

2. Total Budget and Portion Earmarked for Agriculture:

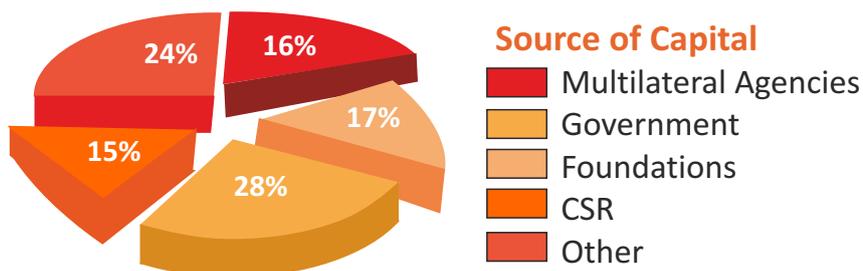
The overall budgets for organizations varied greatly from Rs 5 lakhs to Rs 40 crore due to their size and area of operations. In terms of funds earmarked for agricultural activities, 29% put aside 70-100% of their total budget for agricultural activities and an equal number put aside 21-49% of their total budgets. Securing agriculture-specific funding will enable these organizations to create more focused agricultural interventions.

Percentage of total budget spent on agriculture



3. Source of Capital:

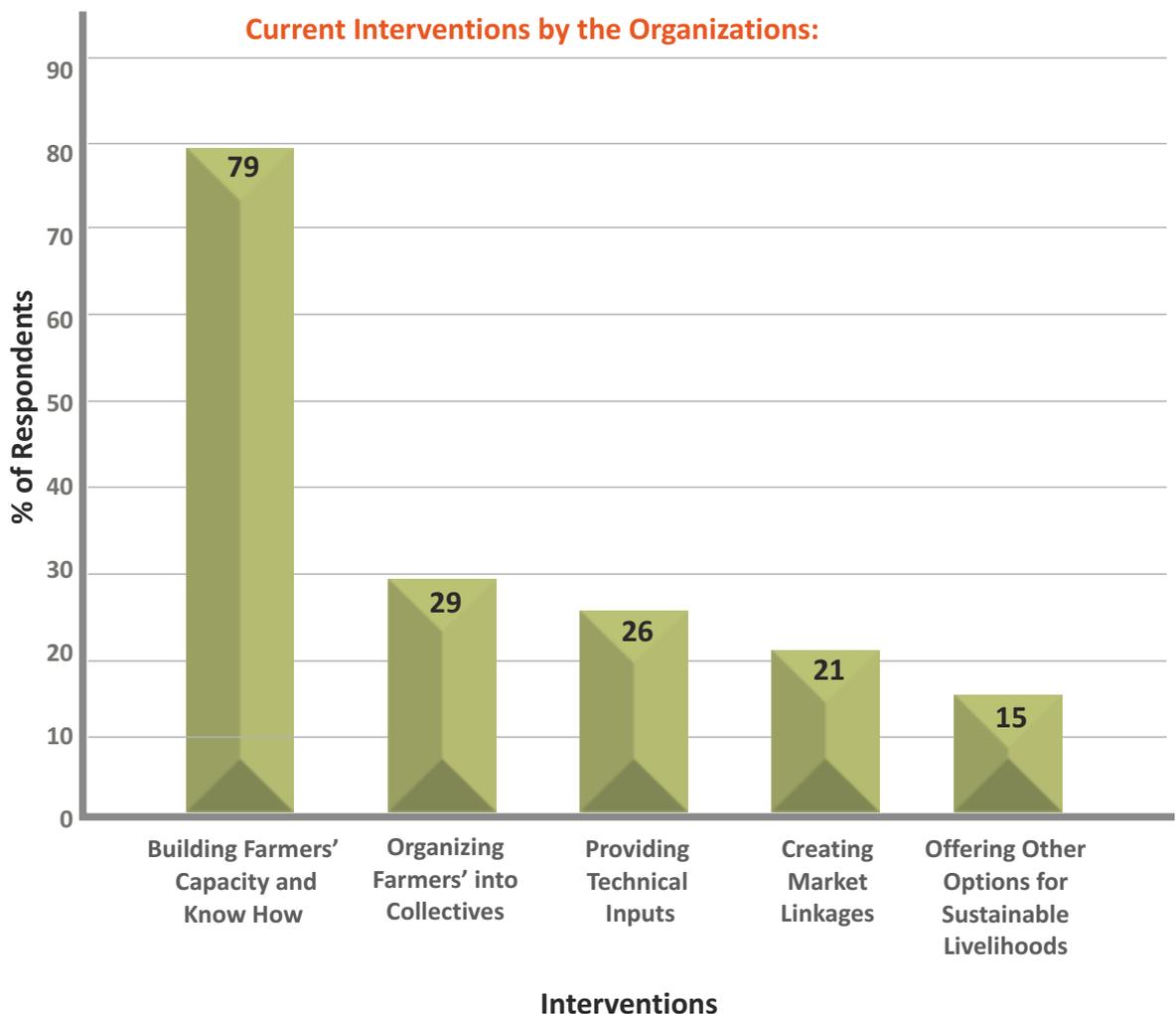
The majority of organizations surveyed, 73.5% depended on funding from the government. Also, most of the organizations depended on more than one source of funding such as multilateral agencies and government. Only around 10% of the organizations pulled money from their own resources for financing their needs. It is evident that organizations working with farmers need to diversify their sources of capital and to include more sustainable sources.



4. Current Interventions by the Organizations:

As shown in the chart below, organizations recognize the key challenges faced by the Indian agricultural sector and have responded accordingly. The need to build farmers' capacities and know-how ranks as the most common intervention covering promoting productive practices, modern farming techniques, awareness about schemes, credit etc. This is followed by 'organizing farmer's collectives' for exchange of best practices, training, better negotiating power etc.

Providing technical inputs for water/ land conservation, energy usage, and equipment handling is also gaining importance and has been highlighted by 26% of the participants. Creating market linkages and offering options for sustainable livelihoods were the other two important interventions by organizations in the sector.



5. Impact of the Interventions

Most organizations in the survey could not really report the impact and reach of their programs. The reports of those who did so vary immensely. Further, the problem of assessing impact deepens in the absence of a uniform unit for gauging impact. Respondents used different units to measure impact such as the number of villages, families, farmers and SHGs impacted.

6. Growth Related Challenges Faced by Organizations:

Lack of Funding: Nearly 40% of the organizations felt that erratic funding is a big concern for them. In fact, according to a respondent, funding was only available when growth is shown whereas growth is dependent on funding, making this a 'chicken and egg' situation. According to them, most donors want to fund short term, specific projects which make it difficult for the organization to have meaningful impact. Moreover, the donors are looking for instant impact which is difficult to showcase in a complex sector such as agriculture.

Talent Management: 50% of the respondents said they face numerous human resource challenges including recruiting the right talent that is willing to undertake rigorous on-field work with farmers, building capacity of the team to deliver desired outcomes and retaining key trained personnel.

Other Key Concerns:

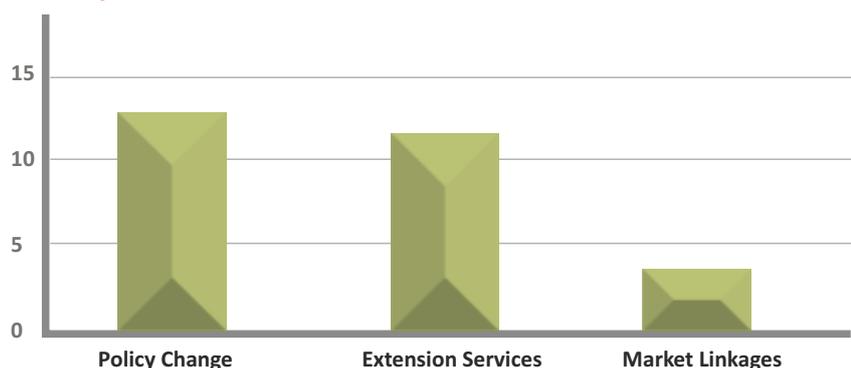
- Lack of capacity building for senior management to scale up the organization
- Migration of the next generation of farmers to non-farm activities in urban areas
- Cumbersome government regulations

7. Policy Recommendations to Address These Challenges

44% of the respondents wanted the government to target specific policies such as leasing of agricultural land and doing away with the APMC Act. Although several supportive government policies and programs have been initiated in the country, there is significant room for improvement in their implementation.

Around 40% organizations expressed the need for the government to provide extension services such as more agricultural research leading to improved partnerships. Private investment in supply chain coordination can enjoy a good return and can include both large and small partners. Interestingly, only a handful of organizations 15% suggested that the government provide market linkages for small farmers even though a majority of organizations focused on providing market linkages as a part of their interventions.

Policy Recommendations to the Government



8. Challenges Faced by Farmers

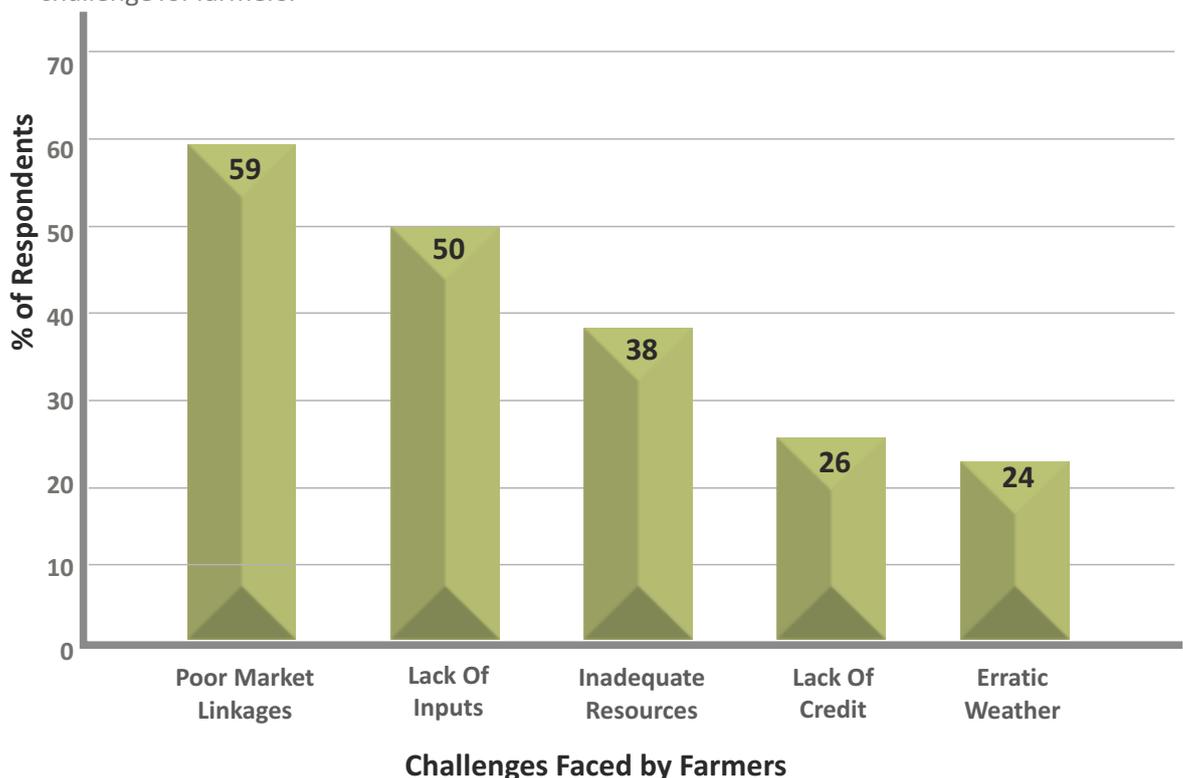
Poor Market Linkages: An efficient marketing system is crucial to ensure competitive prices for both farmers and end consumers. However, Dasra's survey results show that the agriculture value chain of India suffers from multiple bottlenecks making it the single greatest challenge faced by Indian farmers today. Some of the issues that result in poor market linkage include insufficient infrastructure, numerous intermediaries and high transaction costs for farmers.

Lack of Extension Services: In mature agricultural economies such as the United States, farmers benefit greatly from easy access to market information. Indian farmers on the other hand, typically poor and often illiterate, have very limited access to information regarding improved farming techniques, weather forecasts and best practices resulting into decreased productivity and income.

Inadequate Infrastructure: More than one third of the respondents felt that that depleted soils, poor water supply and lack of modern equipment and facilities such as irrigation that are suitable to Indian conditions pose a significant challenge to productivity. Lack of scientific knowledge, as explained in the preceding paragraph, intensifies the issue.

Lack of Credit: Many farmers lack access to formal sources of credit such as financial institutions and have to borrow from 'informal' moneylenders at steep interest rates. Lack of timely credit at reasonable rates affects the production and profitability of the farmer, making it one of the biggest challenges faced by the farmer.

Erratic Weather: Marginal farmers continue to be dependent on monsoons for a productive yield. Irregular rainfall diminishes groundwater and upsets the sowing cycle adversely affecting productivity. Nearly 25% of the respondents felt that unfavorable weather is a significant challenge for farmers.



9. Corporates' Role in Improving Livelihoods of Small and Marginal Farmers

One third of the organizations felt that corporates need to be more engaged with producer groups, ensuring that the latter receive economies of scale in both inputs and outputs especially because this is a good route for market linkages. 24% organizations felt that the private sector could help build capacity by forming common interest groups that could leverage their bargaining power to not only buy inputs and sell produce but also purchase livestock. Respondents agreed that agricultural businesses should also look at enhancing productivity and yield.

10. Partners and involvement with Agribusiness

All organizations surveyed had multiple partners such as bilateral and multilateral agencies, including IFC, DFID; government bodies such as NABARD, the labor ministry and state governments; and corporates such as ICICI and Dabur. Exactly half of the organizations surveyed were engaged with agribusinesses, mostly directly by procuring inputs or supplying output to these organizations.

Dasra's research found that many of the challenges faced by organizations intricately linked to a fragmented and inefficient value chain that constrains growth and profitability can be alleviated at scale through producer groups.



Photo:Manitham

Role of Key Stakeholders across the Agriculture Value Chain

GOVERNMENT	
R&D	<p>Ministry of Agriculture's DARE (Department of Agricultural Research and Education)</p> <ul style="list-style-type: none"> Indian Council of Agricultural Research (ICAR), apex national organization responsible for conducting and coordinating research and education in agriculture with 97 ICAR institutes 53 agricultural universities and Central Agricultural University (CAU), Imphal. ICAR is one of the largest national agricultural systems in the world. <p>Most of the research investments in agriculture are made by the government (\$ 563.2–688.3 million in 2008-09)</p>
INPUTS	<p>Input subsidies: fertilizers, pesticides, irrigation and electricity to keep farm costs low and production high by way of fertilizer subsidies</p>
CULTIVATION	<ul style="list-style-type: none"> Incentivize productivity driven innovation and extension services Encourage greater participation from financial institutions
COLLECTION/ AGGREGATION/ STORAGE	<p>Maximum storage capacity in warehousing held by three public sector agencies make up 58.3% of the storage capacity in the country.</p> <ul style="list-style-type: none"> Food Corporation of India: Storage of foodgrain Central Warehousing Corporation (CWC) 17 State Warehousing Corporations (SWCs) <p>CWCs and SWCs are used for the storage of food grains as well as other items. Need for PPP model for cold chains at the district, taluk and mandal levels</p>
VALUE ADD/ PROCESSING	<ul style="list-style-type: none"> Need for promoting private investment to shorten supply chain Promote region-specific policies
WHOLESALE TRADE	<p>Agricultural Produce Market Committee (APMC) is a marketing board established by the state governments of India for centralized market place - a meeting point for sellers, buyers and agents. The committee is responsible for providing the required infrastructure as well as preventing unfair trade practices by functionaries in the same market area or any part thereof.</p> <p>There is a need felt for the government to promote region-specific policies especially related to the APMC</p>
RETAIL	-

Role of Key Stakeholders across the Agriculture Value Chain

PRIVATE SECTOR	
R&D	<p>Private agricultural R&D expenditure in India has increased from \$54 million in 1994/95 to \$251 million in 2008/09</p> <p>In the 1990s, private research made up about 17% of the total agricultural R&D in India which has risen to a current 27–31%. The most dynamic sectors for private innovation over the last decade have been the seed industry for field crops, fruits, and vegetables; the pesticide industry; and the farm machinery industry</p> <p>Agri businesses have been critical in providing market intelligence so that farmers know what to cultivate and when for maximum gains</p>
INPUTS	Private sector participation has mostly focused on providing genetically modified seeds and hybrid varieties and distributing fertilizers and pesticides
CULTIVATION	Extension services provided by private seed companies to farmers
COLLECTION/ AGGREGATION/ STORAGE	Before 2000, private sector interest in warehousing industry was low due to its capital intensive nature and high uncertainty over revenue generation. Private sector interest in warehousing industry picked up after the “Rural Godown Scheme” was introduced in year 2001-02 under National Bank for Agriculture and Rural Development (NABARD) and National Cooperative Development Corporation (NCDC).
VALUE ADD/ PROCESSING	<p>The level of processing has been low- only 2% of fruits and vegetables. As processing is becoming increasingly important to help farmers to realize a better price, certain indigenous value added products like fruit drinks from lesser known fruits including health drinks have been developed</p> <p>Companies need to focus on the business lifecycle and how the business can use resources differently by investing in common property areas through corporate philanthropy</p>
WHOLESALE TRADE	<ul style="list-style-type: none"> ● Agribusinesses procure from APMC mandis or through the cash and carry model. ● In case of contract farming where corporates procure directly from the farmers.
RETAIL	Corporate houses like Godrej, Reliance and Walmart minimise role of middlemen and reach farmers directly

Role of Key Stakeholders across the Agriculture Value Chain

NON PROFITS	
R&D	There are few NPOs conducting research in Agriculture. This is dominated by international NGOs Need to undertake path breaking pilots for the private sector to step in
INPUTS	<ul style="list-style-type: none"> ● NGOs are instrumental in organizing producer groups that collectivize farmers ● Assist farmers in procuring inputs like seeds and fertilizers on their behalf ● There is a need for NGOs to fill gaps that cannot be filled by the government and the private sector like technology transfer, providing low cost tools etc. as they don't have the bandwidth to undertake capital intensive investments
CULTIVATION	<ul style="list-style-type: none"> ● Extension services to farmers ● Building farmer capacity to practice better farming techniques
COLLECTION/ AGGREGATION/ STORAGE	Producer Companies typically aggregate individual farmer produce Non profits aggregate produce from individual farmers on a small scale so as to provide market linkages
VALUE ADD/ PROCESSING	Non profits typically provide inputs on basic post harvest value addition such as sorting, grading etc.
WHOLESALE TRADE	-
RETAIL	Some non profits brand produce and provide linkages to retail outlets

Role of Key Stakeholders across the Agriculture Value Chain

SOCIAL BUSINESSES	
R&D	-
INPUTS	Social Businesses typically form producer groups and sell inputs such as low cost drip irrigation/ treadle pumps
CULTIVATION	<ul style="list-style-type: none"> ● Provide extension services to the farmers ● Building farmer capacity to practice better farming techniques
COLLECTION/ AGGREGATION/ STORAGE	Collaboration with retailers for wholesale supply (e.g. UTMT)
VALUE ADD/ PROCESSING	Social businesses provide value addition services like grading, packaging etc. and some also have processing units
WHOLESALE TRADE	-
RETAIL	<ul style="list-style-type: none"> ● Retail presence independently or in collaboration with a private label. ● Fair trade is a good case in point

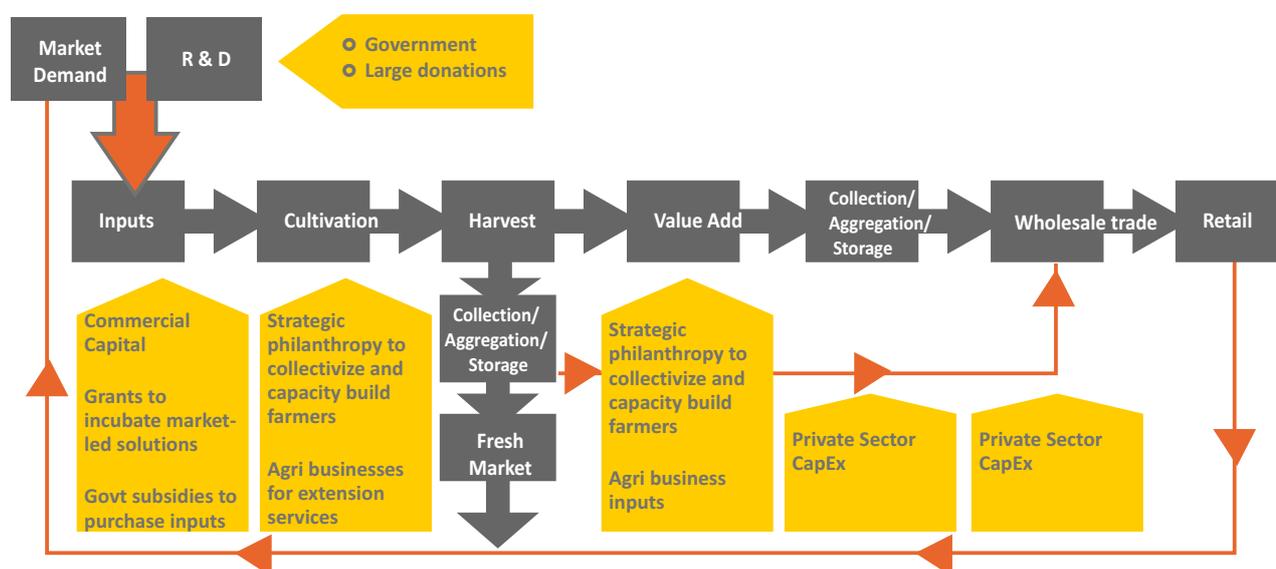


Photo: Angan

Structural Innovation to Improve Small and Marginal Farmer Livelihoods- Producer Companies

In recent years, the formation of producer groups, also known as farmer producer organizations and producer companies has emerged as an innovative solution that can overcome the challenges faced by small and marginal farmers throughout the value chain, as reiterated by the respondents in Dasra's research. Our field research, which includes case studies of four producer companies, also shows that this structure has enabled social organizations to organize and mobilize farmers to create economies of scale in supply as well as in demand, increasing the sustainability of operations and income for farmers. While there are myriad investment opportunities and needs in the agriculture space, Dasra believes these should be tailored to specific points of the value chain, as can be seen in the chart. We recommend that strategic philanthropy considers supporting the formation and scaling up of producer companies to create catalytic and sustainable, farmer-led change. As described in the following pages, a number of interventions can be delivered through a producer company that not only overcome challenges faced by farmers and organizations but do so at scale, building financial and operational sustainability from the start.

Agricultural Value Chain and types of Investments required



Defining Producer Companies

- The structure of a producer company is fairly similar to that of a cooperative. The term indicates the affiliation and ownership of a set of primary producers who are engaged in an activity connected to primary produce. Thus this structure is applicable to farmers, artisans, and other producers. A producer company is incorporated by any one of the following entities:

- Ten or more individual producers
- One or two producer institutions
- A combination of the above (10 individuals + 2 institutions)

A producer company is often described as a hybrid and a private limited company. The producer company model came into being in India through an amendment to the Companies Act in 2002. This legal entity was intended to overcome the structural constraints faced by cooperatives (governance and state dominance) and enable primary producers to participate in liberalized markets.

Under section 10 (1) of the Income Tax Act, income from agriculture is exempt from income tax. However, in the case of producer companies, this depends on the nature of the companies' activities. For instance, if green tea leaves are grown and sold directly without any further processing, the income derived from such an activity is considered as agricultural income under the Act and is 100 % tax free. But if the green tea leaves are further processed and tea is manufactured, only 60% of the income is considered as agricultural income and the tax exemption is applicable on that 60%.²³

While the ethos of producer companies resonates with that of cooperatives, the two entities are distinct in many ways, as described in table on the next page.

What is a Producer Company?

It is a legal institution, registered under Company Amendment Act 2002 (1 of 2003) or also called Producer Company Act 2002. The new type is termed as 'Producer Company', to indicate that only certain categories of persons can participate in the ownership of such companies. The members have necessarily to be 'primary producers', i.e., persons engaged in an activity connected with, or related to, primary produce.

What is Primary Produce?

In terms of the Act it is a produce of farmers arising from agriculture including animal husbandry, horticulture, floriculture, pisciculture, viticulture, forestry, forest products, re-vegetation, bee raising and farming plantation products: produce of persons engaged in handloom, handicraft and other cottage industries: by – products of such products; and products arising out of ancillary industries.

Why Producer Company?

After realizing the needs of the farmers, given the challenges of the world market and uncompetitiveness of existing Cooperative Acts and institutions, the Government of India set up a committee under the Chairmanship of a noted economist, Y.K Alagh in 1998. The objectives of the committee were: (a) to frame a legislation that would enable incorporation of cooperatives as companies and conversion of existing cooperatives into companies and (b) to ensure that the proposed legislation accommodated the unique elements of cooperative business with a regulatory framework similar to that of companies. Thus, in the Companies (Amendment) Act 2002, (1 of 2003), a separate category, came into force and producer companies, 'found a place in the Act. For this, a new Part IXA, divided into 12 chapters, has been included in the Companies Act, 1956, comprising 46 sections, interestingly numbered as 581A to 581Z and 581ZA to 581ZT

COOPERATIVE AND PRODUCER COMPANY – KEY DIFFERENTIATORS

FEATURES	PRODUCER COOPERATIVE	PRODUCER COMPANY
Registration	Cooperative Societies Act	Companies Act
Membership	Open only to individuals and cooperatives	Only those who participate in the activity
Relationship with other corporates/ business houses/ NGOs	Transaction based	Producers and corporate entity can together float a producer company
Shares	Not tradable	Not tradable but transferable
Voting Rights	One person, one vote, but Government and RCS holds veto powers	One person one vote. Those not having transactions with company cant vote
Reserves	Created if there are profits	Mandatory to create every year
Role of Registering Authority	Significant	Minimal
Administrative Control	Overbearing	None
Borrowing Power	Restricted	More freedom and alternatives
Dispute Settlement	Through Cooperative Mechanism	By Arbitration

Source: Murray E.V. *Producer Company Model - Current Status and Future Outlook: Opportunities for Bank Finance*

Historically, non-profit organizations have been instrumental in mobilizing and collectivizing their beneficiary bases of small and marginal farmers to set up producer companies. Due to three fundamental characteristics of producer companies, described below, it makes it harder for them to implement interventions for small and marginal farmers: access to finance, professional management and reserves.

First, in India, most producer companies are still at a nascent stage and generally provide technical knowhow or facilitate marketing – as articulated in the survey too. This could be why they have not been borrowing significant amounts from banks. However, even if they do so, this could be a big challenge for banks that would just have the producer member equity to leverage borrowings. This in turn could make it difficult for farmers to borrow. Second, in order to gain the most from the producer company framework, cooperative principles must be incorporated with commercial operations. That again depends to a great extent on how professionally managed and run the producer company is. Third, since it is mandatory for every producer company to maintain a general reserve in every financial year, when the reserve falls short, it has to be made up by members' contribution in proportion to their patronage in the business. This could be a huge challenge as the producer company's members, mostly farmers, might not have the financial resources to meet these requirements.

Despite these three restraining characteristics, producer companies have the potential to be hugely beneficial for Indian farmers. According to EV Murray, this structure is still in an early stage of its evolution particularly in India as depicted in Table above.

THE THREE STAGE EVOLUTION PROCESS OF PRODUCER COMPANIES



Source: Murray E.V. *Producer Company Model - Current Status and Future Outlook: Opportunities for Bank Finance*



Photo: Mandeshi

If harnessed appropriately, producer companies have the potential to galvanize significant returns for small and marginal farmers. Evidence from the field suggests that they are enormously beneficial in numerous ways. However, since most Producer Companies are promoted by NGOs, it is important to ensure that vested interests do not compromise the capacity of organizations that represent small producers.

There is a need for producer organizations to constantly reinvent themselves as they need to operate in a dynamic environment that is influenced by globalization and its impact on agrifood markets. Growing demands for quantity, quality and variety from consumers is creating business opportunities in the countryside. Small-scale farmers individually are coming across more traders and buyers at the farm gate and in local markets, which makes it even more challenging to get acceptance of producer companies from farmers – as has been recorded in the case studies. In such a case, farmers' individual and collective agency is pivotal for them to organize themselves and capitalize on bargaining power. Also, while low prices hurt farmers, producer organizations need to be aware that rising prices can be a big threat to them as members could 'side-sell' their produce to traders and break contracts and agreements.

Since many producer groups provide market linkages to farmers, there is a need for them to step up their investment in collective marketing schemes as marketing could be capital intensive. These organizations might also at times be unable to offer competitive prices to farmers. It is in such cases that formal financing, technical support and other services by private intermediaries could be helpful. In order to implement programs, 'horizontal' strategies rather than 'vertical integration' could be explored. Unlike 'vertical integration' that aims at linking one group of producers upward through the value chain to a buyer, horizontal strategies recognize the fact that a majority of producers are not formally organized into marketing groups and therefore come up with solutions to raise the rewards or inclusiveness of an entire sector. For this to happen, information technology can play a very significant part by allowing individual farmers to take more direct action in markets.

It is also important that while examining how small farmers interact with formal organizations to see who creates and controls these groups, whether there are vested political interests and what role there is for farmers' agency to shape activities. Producer groups should not generate dependency but create agency among farmers.

Benefits of a Producer Company

Dasra's research has shown that producer companies are a powerful tool to create economies of scale for small and marginal farmers, streamline the value chain, increase farmer bargaining power in procuring inputs and selling their produce, and provide greater access to markets. Our research has revealed several areas in which producer companies are creating an impact. These include:

● Scale of Operations

The small-scale nature of land and cultivation, variations in soil and access to inputs constrains the ability of farmers to produce at competitive volumes and quality. As a result, small farmers typically pay a higher premium for smaller quantities of inputs such as fertilizers, pesticides and irrigation. Selling their produce at the farm-gate does not reap significant profits. Groups of farmers in producer companies can leverage their collective landholdings and numbers to demand fairer prices for inputs, cultivate larger quantities of the same crops, standardize quality of produce and sell at higher volumes. In addition, these companies can invest in input and harvest technologies that would be unaffordable for an individual farmer. Dharani Farmers' Cooperative, an Access Development Services (ADS)-promoted producer group, witnessed a rise in prices of produce from the farmers partly due to rise in retail prices and partly due to collectivized produce (more details are available in the case study on Dharani on page 39)

● Aggregation and Post-Harvest Value Addition:

Although India is the second largest producer of vegetables and the fourth largest producer of fruits in the world, the sufficiency of production is in question as the population increases continuously and because of losses in the field and lack of storage facilities. Generally, about 30% of fruits and vegetables are considered unfit for consumption due to spoilage after harvesting. India annually produces fruits and vegetables of the value of about Rs 7,000 crore and wastage may be of the order of Rs 2,100 crore (Chandi, n.d.).

Post-harvest loss of fruits and vegetables can be attributed to primary and secondary causes. The former comprise mechanical problems such as careless handling, microbial spoilage caused by fungi, bacteria, yeast and molds, environmental factors such as temperature, humidity, composition and proportion of gases in controlled atmospheric storage. Secondary factors include inadequate harvesting, transportation, storage and marketing facilities (Chandy, n.d.).

Producer companies are strategically placed to address issues that lead to wastage. By providing extension services independently or in collaboration with private players, they can help reduce waste substantially. During Dasra's primary research, farmers in different regions unequivocally advocated the need to strengthen extension services.

Further, aggregation, sorting and storage facilities through warehousing need to be made more accessible to farmers. These, however, are capital intensive and require large-scale investment, which makes them difficult for producer groups to foray into. During our research, Uday Producer Company in Andhra Pradesh's Gajwel village highlighted how difficult it was to provide 1,000 gunny bags to some farmers at one time to store wheat and how an agribusiness the producer group was dealing with was asked to provide these (more details are available in the case study on Uday Producers on page 36)

Farmer's view on the company

Badrilal Malviya a shareholder farmer of village Suagaon in Shajapur district said “the company has given new hopes. In the last season while we received quality seeds and fertilizers from the company at a reasonable rate, the non shareholder farmers were affected as fertilizers were not available in the market. I also sold my farm produce to the Company. It saved my time and money. I received extra premium of Rs 100-150 per quintal on selling soyabean and wheat as compared to local market. I wish to purchase all agricultural inputs from the company since it is our organization and profit shall be distributed between us.”

Source: Dwivedi and Joshi 2007, Producer Company- A New Generation Farmers Institution

○ Capacity Building of Farmers

To develop their capabilities, including financial skills, small and marginal farmers need access to education, technology, knowledge and information.

Producer organizations can make a huge impact here, mostly by providing and enhancing extension services through linkages between extension providers and smallholder farmers. Following this, producer companies can focus on emerging needs such as social protection and market regulation and also engage in policy dialogues towards improving rural livelihoods and building capacity to help achieve domestic food security (More details are available in the case study on Koutla-B MACS on page 45).

○ Creating Market Linkages

Producer companies can help ensure a steady demand for produce and link farmers to the markets, also ensuring that they are represented well.

Agribusinesses are looking to make substantial investments in building supply chains for a consistent supply of high quality produce, which is not possible in the current mandi and APMC system. These businesses are keen to establish stronger ties with farmers and the producer company model provides an excellent platform. As these enterprises do not have the capacity to deal with farmers dispersed across different areas or do not intend to do so, they are looking for aggregators or intermediary institutions that can pool produce in adequate quantity and help them to deal with a large number of small landholding farmers. For instance, Vapcol, the BAIF-promoted producer company facilitated farmers' linkages with markets, eliminating the 8-10% commission that middlemen would otherwise have made (more details are available in the case study on Vapcol on page 42).

○ Womens' Empowerment

According to the National Commission for Enterprises in the Unorganized Sector (NCEUS), 72.8% of women were involved in agriculture activities in India in 2007 compared with 48.9% of men (SEWA, 2009). However, women are not considered to be farmers and their contributions are not recognized. Moreover, they face unequal access to information and technologies, productive assets and markets. Ensuring that women are engaged in the functioning of producer groups is vital as it helps in safeguarding their interests. According to the International Fund for Agricultural Development IFAD (2010), governments, donors, NGOs, and support groups can strengthen women's leadership in farmers' organizations by earmarking funds (e.g. community development funds, community-driven development funds for women); providing direct funding to farmers' organizations through grants (but only to member-based, women-only groups or mixed groups that have achieved a minimum women's quota of 30% or to a project to attain 30%); supporting women to commission research on their own terms, with academics and research organizations; and strengthening partnerships with government machineries for women's economic empowerment, based on existing policy mandates, laws and programs. Dasra's research found that even though women SHGs were active in certain regions, this did not translate into better representation of women in producer groups, a case in point being Uday Producer Company (more details are available in the case study on Uday Producer Company on page 36).



Photo: Manddeshi



Photo: Mandeshi

Case Studies on Producer Companies

Uday Agriculture Producers Ltd Co.

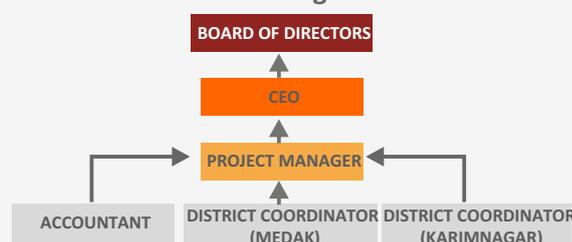
Founded: July 2010

Founder: Promoted by Access Development Services

Region of Operation: Present in 3 districts of Andhra Pradesh: Medak, Karimnagar and Nalgonda

Kind of Organization: Registered under the Companies Act (Amended) 2002

Structure of the organization:



Impacts livelihoods by providing farmers with better inputs

Input Supplies: Supplies farmers maize and paddy seeds from Pioneer and gets a margin of around 8-10% on the sales

Market Linkages: In 2011-12, Uday Agri procured maize for Malaxmi Agrovet and also forged an alliance with Mars Inc.

Lower Costs to farmers: Uday Agri has provides seeds to farmers at lower costs. So while a 2-kg bag of wheat costs Rs 60 less (price paid is Rs 190 compared to Rs 220 in the market), there is a price difference of Rs 30 for every 4-kg packet

Easier availability of funding: It is easier to avail of loans by organizing farmers into producer groups as 90-95% people in the villages take loans at around 3% per month and the uncertainty regarding loan waivers looms large

Problem to be Solved:

Small farmers in Andhra Pradesh are chronically on the brink of crisis: they face challenges of low and stagnant productivity, high input costs, unpredictable rainfall, crop failure, high debt, and labor out-migration. Further, they lack information on prices and have poor access to inputs, markets, and technology. To tackle these issues, project Uday was launched in November 2007 to reach out to poor farmers with better inputs in agriculture, thus improving livelihoods.

About the Organization:

Uday Agri Business came into existence out of the credit and saving program for household enterprises (CASHE), a microfinance project by CARE that ran between 1999-2006 in West Bengal, Orissa, Madhya Pradesh and Andhra Pradesh. The project gave ample insights into conditions of households that were mostly engaged in rain-fed agriculture based mainly in Andhra Pradesh. Under the CASHE program in Andhra Pradesh, US-based Pioneer Hi-Bred International, Inc. (now referred to as DuPont Pioneer) supplied hybrid cotton and maize seeds to farmers. The CASHE program ended in 2006 and Access Development Services (ADS) was formally launched subsequently. ADS continued working with Pioneer Seeds and supplied seeds to the farmers through three local not-for profits, with whom CARE was also involved. The project gained momentum in November 2007 in three of Andhra's districts— Nalgonda, Medak and Karimnagar, and in 2010 ADS decided to interact with farmers directly, thereby disengaging with the NGOs.

Uday Agri Business was subsequently incorporated in June 2010. Apart from selling hybrid seeds at subsidized rates (through government schemes), the producer company promised to provide extension services through demonstration fields and provide other inputs such as fertilizers. So far there has been just one rabi crop (winter crop).

Interventions:

● Input Supplies:

Uday Agri Business supplies farmers maize and paddy seeds from Pioneer and gets a margin of around 8-10% on the sales. Though the producer company is not one of the large distributors of Pioneer Seeds (it accounts for sales of 1-2% of Pioneer Seeds in the state), the fact that it forged an alliance with Pioneer has earned it popularity and goodwill in villages as the farmers prefer to buy hybrid seeds from producer companies rather than from the open markets.

These farmers typically have landholdings of 3-5 acres and they generally grow maize and cotton on a rotation basis with an average yield of 3-tonnes per acre.

Uday Agri also started to distribute fertilizers through a dealership from a fertilizer company but now plans to phase out the service as the shortage of fertilizers – the reason for the partnership – is easing. The producer company started distributing fertilizers to farmers as the latter were dependent on black markets offering around 20-25% more for every bag of fertilizer; farmers had to queue outside police stations in order to get fertilizers. Moreover, in the cropping season in 2011 itself, the prices of fertilizers increased four-fold

○ **Market Linkages:**

Uday Agri provides market linkages to farmers. During 2011-12, Uday Agri procured maize for Malaxmi Agrovet that has an international presence in Australia, Thailand and Malaysia. Uday Agri also forged an alliance with Mars Inc., a US-based manufacturer of well-known chocolates such as Mars and M&M for procuring maize from farmers for Mars' pet care business that includes pedigree foods. To help meet the requirement for high quality maize, farmers were trained by Mars through their field staff. Additionally, in order to win farmer confidence, Mars offered a premium of 10-15% per quintal of the produce which translated into a premium of Rs 100 per quintal for farmers or Rs 1,200 per quintal of maize instead of Rs 1,100, even though 40% of the procurement did not meet Mars' testing standards.

Farmers were also educated around the harvest time on plant susceptibility to damage and therefore the need for pre- and post-harvest precautions. During the pilot in 2011-12, 20 farmers supplied 80 mt tonnes of maize.

Impact:

So far farmers have not seen enough value from Uday Agri mainly because the company started operating only recently. In 2011 when Uday Agri started supplying fertilizers to farmers, they faced many problems. For instance, they paid money for fertilizers in June but received them only by July-end; meanwhile the cost of fertilizers had risen and they had to make up the difference. Farmers did not have the money to buy from the local market for this very reason. Uday Agri in turn did not have enough working capital to pay an advance for the fertilizers. Nevertheless, Uday Agri did provide the following benefits to farmers:

- **Lower Costs:** Uday Agri provides seeds to farmers at lower costs, Rs 190 compared to Rs 220 in the market, so that a 2-kg bag of wheat costs Rs 60 less and a 4-kg packet Rs 30 less. Additionally, the material handling cost of Rs 20-30 per quintal is removed as the procurement is made from the farm gate. Uday Producers has a membership base of 700 shareholders though it affects 7,140 farmers indirectly.

- **Easier Availability of Funding:** It is easier to avail of loans by organizing farmers into producer groups. Around 90-95% people in the villages take loans at around 3% per month, or 36% annually, and loan waivers are not always certain. Importantly, loans are disbursed in both cash and kind. Over and above the interest that the farmers have to pay, they also have to sell their produce to the moneylender.

Challenges:

- **Gaining Farmers' Confidence:** According to the board members of Uday Agri, it is very difficult to gain acceptance from farmers as far as registering themselves in the producer company is concerned. Additionally, there have been problems in getting banks to finance producer groups as in some cases the farmer(s) defaulted on loans.

○ **Competition:** A huge problem that Uday Agri has dealt with in the past and foresees is competition from different regions in selling produce. For instance, Malaxmi Agrovet had estimated a demand for 10,000 mt tonnes maize and approached Uday Agri, which got the producer group a Rs 5 lakh advance. After a week, the farmers could sell only 100 mt tonnes as Malaxmi Agrovet decided to procure maize from the neighboring state of Karnataka where the price had fallen. Also, the farmers had estimated a demand for 1,000 gunny bags that would store 10,000 mt tonnes maize. Since the farmers could not provide the gunny bags, Uday Agri stepped in and invested Rs 1 lakh apart from Rs 5 lakh advance it had received from Malaxmi Agrovet.

○ **Women's Participation:** The impact of the program on women has been dismal. So far there are no women members on the board though the farmers maintain that women will be inducted soon and are just testing waters. This is surprising for two reasons. Firstly, the SHGs presence in the village is strong and should translate into their representation in the producer company; 19 SHGs with 15 members each are very active (disbursing loans from Rs 4,000-4 lakh per member each month) and have a good rapport with local banks. But they have not been able to garner that kind of support for the producer group. The reason, women say, is that they are wary of using the SHG infrastructure in producer groups since the large size of interventions in agriculture makes them fear farmer default on the loans. As a result, the entire village might be blacklisted. It is important to mention that even the money borrowed by the SHGs that goes into agriculture is mostly used for allied services such as maintaining livestock or readying the fields and not for major works. It is a sticky situation for Uday Producers since they need participation by women as they look at Friends of Women's World Banking (FWWB) for loans. It is also ironical that women are not represented in the producer company since they are engaged in all agricultural activities such as weeding, sowing and harvesting. Unfair wages are also rampant across the agricultural activities here as women are paid Rs 150 per day for weeding while the men take home Rs 200 as the latter find it a job below their dignity.

○ **Rising Cost of Farm Labor:** Due to the government's flagship National Rural Employment Guarantee Scheme (NREGA) that guarantees 100 days of employment a year to each rural household – the cost of farm labor has risen while the availability of labor has declined, which increases the cost of production for farmers attached to the producer companies. While for maize, it takes about 45 people for 1 acre land through sowing to harvesting, for cotton 65-70 people are required per acre through sowing to harvesting. Wages have risen by 150% in the last 4 years in this region; so while women get Rs 150 per day, men get Rs 250-300 per day.

Plans:

There is a huge opportunity for Uday Producers to be a part of the poultry feed value chain: procure livestock feed and create market linkages for the same. Soybean cultivation will be crucial for this and is being seen as the next major crop. As it is, there has been a shift in the cropping pattern from red/ green grams to soya, and maize and soya remain a contingency crop for paddy growing areas.

As part of corporate involvement, there is a huge need for providing primary processing units at the field level in future. Packaging and grading units are also needed locally and will have manifold benefits: reduce transportation costs, create more employment and provide sustainability since the units will be locally available there will be no disruptions in getting the products.

Dharani Faam Co.

Founded: April 2008

Founder: Cooperative promoted by Timbaktu COLlective

Region of Operation: Anantpur, Andhra Pradesh

Kind of Organization: Producer group

Procures, processes and markets the produce of its farmer members at best price

Provides Market Linkages: As of now, groundnuts account for 50-60% of sales and millets make up 20% followed by honey that makes up the remaining 10%.

Loans: Dharani has given out cattle loans. Around 600 native cows have been provided to farmers

Extension Services: In order to ensure that farmers actually meet the standards of organic produce, Dharani conducts inspection bi-annually

Higher prices to farmers: The price at which Dharani procures the produce from the farmers is determined by the shelf price of the goods. Around 2-3 years ago, Dharani used to buy millets at Rs 8-10 per kg and now does so at Rs 17-20 per kg

Problem to be Solved:

Dharani was born in order to address the problem of the high number of farmer suicides in Anantpur. Andhra Pradesh's largest district, Anantpur, which receives the second lowest rainfall in India after Jaisalmer in Rajasthan, is mostly a mono-crop area where a majority of farmers depend on rains for their yields. Agro-climatic uncertainty coupled with weak market linkages for their produce drives these small and marginal farmers to take loans at exorbitant rates to keep themselves afloat.

About the Organization:

The main objective of the Cooperative is to procure, process and market the produce of its farmer members at the best price possible. During a review in 2005, it was noted that 60% of the loans taken for agriculture was going into fertilizers and the remaining 30-40% was earmarked for labor. "We realized that the bulk of the loans farmers took would go in to purchasing fertilizers and pesticides," says Mary Vattamattam, secretary of Timbaktu Collective, the NGO that promotes Dharani.

It was actually the women's thrift society, Adisakti Cooperative that gave rise to Dharani once it became clear that of Rs 5.5 crore disbursed as loans, Rs 1.6 crore was going into agricultural activities. This thrift group that had started with savings of Rs 10 per person per month had the financial resources to start Dharani. So while the friends of Timbaktu Collective contributed Rs 37 lakh for plant, machinery and building, women from Adishakti invested Rs 3 lakh. In fact, during Dharani's first year of operation, Adishakti focused on marketing the produce since it was stable financially. Subsequently, Dharani had to be floated as a separate entity as it started to pick up and Adisakti found it difficult to manage operations.

Through the 2005 review, it also became clear that organic cultivation reduces the cost of cultivation substantially. However, among other things, it requires locally made concoctions of cow urine and cow dung to replace fertilizers. For small and marginal farmers it was a double whammy: not only was there a growing need for livestock for manure and ploughing, there was also an urgent need to address the problems of land degradation that was exacerbated by caste hierarchies. Those who were well down in the caste hierarchies had land away from water sources and of poor quality. After extensive consultation, it was decided that animals would be procured from Rajasthan and Gujarat; 500 pairs of halyard cows were bought for the 'superior quality urine' in order to increase millet cultivation, and improve soil fertility, biomass and livestock availability.

Though Dharani was incorporated in 2008, work within agriculture started in 2005 in 9 villages (with 20 farmers in each village). A day-long orientation program on materials used in organic farming and in farming fields was organized by Timbaktu Collective. In order to document all learnings and keep a tab on the process, a young and educated volunteer from each village was assigned the task of all documentation.

Dharani's evolution can be traced through three different phases.

The first phase (2005-2008), funded by the Sir Dorabji Tata Trust (SDTT), covered 17 villages and 20 farmers were selected from each village. The objective of the project was to promote organic farming, bring down the cost of production and provide market linkages. There was a lot of work on farmer development, land fertility, and organizing farmer field schools. The impact of the project has been positive; impact data was, however, not completed at the time of this report.

The second phase (2008-2012), funded by the EU and EED, covered 18 additional villages, taking the number of villages to 35. Apart from increasing organic cultivation and lowering cost, two more features were added – procuring halyard cows and strengthening the marketing side.

The third phase (2009-2013), funded by SDTT, worked on the old model, but with a slight variation. Instead of organizing 20 farmers per village, under this phase the number of farmers was reduced to 15 per village.

Interventions:

Having started the organic initiative on their own land of around 6 acres, Dharani now has 1,050 farmers as its members and operates in 35 villages thereby getting 5,000 acre under its fold.

The interventions undertaken by Dharani are best understood in light of government policies on agriculture in Anantpur. Around three to four decades ago, Anantpur was primarily engaged in millets cultivation. However, in the last 30 years and more intensely in the last 20 years, the government changed policy towards favoring groundnuts over millets and offered drought relief packages. Farmers got used to this as they wanted to be compensated even in a good cropping season. Subsequently, the government started providing monocrop insurance for groundnuts and red gram and not for millets.

Dharani interventions are as follows:

- **Market Linkages:** As of now, groundnuts account for 50-60% of sales and millets make up 20%, with honey making up the remaining 10% of sales. However, there seems to be a growing need to create demand for millets as millets in 'ready to eat' form can be sold at a higher price. Therefore, Dharani has started providing millets in this form. This is done by organizing stalls, advertising through pamphlets and on TV and radio. All this is being done in south India and rural markets are not being targeted intentionally as these would incur high transportation costs. In 2011-2012, Dharani clocked sales worth Rs 56 lakh.
- **Loans:** Another Dharani intervention is providing cattle loans. Around 600 native cows have been provided to farmers; 500 through project loans provided by the EU and EED and 111 (at the cost of Rs 20,000 per pair) through grant funding from Timbaktu Collective's own network. In the past Dharani has also disbursed loans for seeds or seeds credit. Dharani also provides weighing facilities as farmers often get cheated by middlemen when their produce is weighed.
- **Extension Services:** In order to ensure that farmers actually practice organic methods, Dharani conducts inspection bi-annually through one farming volunteer and 1 brindam (group of 4-5 farmers formed from a bigger set of sangha members consisting of 15-30 farmers) member. Dharani also provides organic certification to its members through the Participatory Guarantee System (PGS, promoted by the PGS Organic India Council, Organic Farming Association of India (OFAI) - Goa and the Food and Agriculture Organization United Nations, New Delhi (FAO-UN).

In a bid to provide market linkages, Dharani encourages buying from the farmers and has created a retail base from 2005. There are 60 retail shops located across close to 20 towns including Hyderabad, Bangalore and Mysore.

Impact:

Higher prices for the farmers: The price at which Dharani procures from the farmers is determined by the shelf price of the goods. This price has gone up in the last few years, benefitting farmers immensely. For instance, the price of millets today is Rs 17-20 per kg compared to Rs 8-10 per kg around 2-3 years ago. As for honey, while the traders pay Rs 150 per kg, Dharani pays Rs 200 per kg and intends to offer a 25% price premium. A large number of middlemen taking a commission of Rs 10 per bag have now been eliminated. The fact that Dharani is on the right track is evident by its performance. The standalone profit in 2011 was Rs 14,000 and has been kept as reserve while the cumulative profit from 2008 onwards stood at Rs 2,26,000 despite subsequent crop failure due to a failed monsoon. Higher sales and profits will be distributed among the producers as dividends.

Challenges:

- **Infrastructure:** Operations need to be strengthened by providing better infrastructure such as processing facilities and storage. While 30% of all farmers' produce comes to the cooperatives, 60% goes to the market because the producer company does not have the capacity to store or process it.
- **Conducive Policy Environment:** Unlike the SHGs that have political support, farmer cooperatives are all self-run and do not find a suitable place within government policies. This makes it difficult for them to avail of credit.

Plans:

Dharani plans to play a key role in conserving the environment too. In order to incentivize farmers and be a part of the global efforts to contain global warming, the Collective, as a member of the Fair Climate Network, began building a database with all information about the participating farming families including the GPS coordinates of their lands. This will help in developing a database for Low Carbon Farming, enabling farmers to sell carbon credits and enhance their income. This work has been financially supported by EED, Germany, as well.

For now at least 2,000 farmers have been impacted. For every 2-3 acres, they get produce amounting to 10 bags and a Rs 200 premium on each bag. In the next five years Dharani aims to reach 10,000-15,000 farmers.

For management, the most suitable arrangement would be if a corporate decided to offer the best price to buy the produce. "They should talk to us before the crop is ready and we can subsequently speak to the farmers and make the arrangements. Even if there is a little margin it is alright. We can negotiate prices with them," says a Dharani official. According to him, if the corporate wants ready products they could install processing units, infrastructure, machinery, cold storage, etc., which is especially good for seasonal storage.

Vasundhara Agri Horti Producer Company Ltd. (VAPCOL)

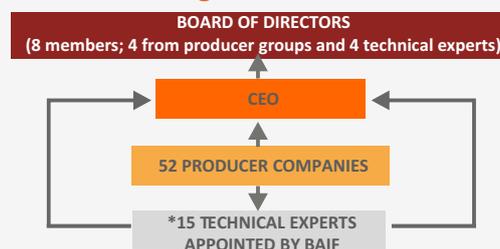
Founded: 2004

Founder: Promoted by BAIF

Region of Operation: Eight states

Kind of Organization: Registered under the Producer Companies Act

Structure of the organization:



Concentrates on tribals' livelihoods through farming, processing and retailing mangoes and cashewnuts

Started with a vision to control migration to cities around Vandsa in Navsari district of Gujarat

Financial Support: Member-cooperatives can get loans for their working capital requirements and for payments to the farmers for their produce

Market Linkages: Vapcol markets the finished products for cashew kernels and mangoes under the brand name Vrindavan and uses cost-plus margin method of pricing set at 6%

Timely payment to farmers: Farmers are paid by the second day of procurement by cash if the produce is less than Rs 5,000 otherwise the payments are made by cheque within two days.

Problem to be Solved:

This project concentrates on tribals' livelihoods through farming, processing and retailing mangoes and cashew nuts. It was started with the vision of controlling migration to cities around Vandsa in Navsari district of Gujarat. Prior to this, families usually grew paddy, which meant that they were engaged in agriculture for only 8-9 months; for the rest of the year they migrated to neighboring towns Surat, Ahmedabad and Vapi in search of work. This often meant neglecting their health and families. Eventually, farmers realized that with a second crop there would be no need for migrating and that by maintaining soil moisture they could cultivate other crops such as vegetables and pulses.

About the Organization:

Vapcol has its roots in the wadi project that was started by BAIF in the 1980s. Wadi, in Gujarati, means an orchard. During Vapcol's inception, tribals in and around Vandsa in Navsari district were told that they could join the wadi project only if they quit alcohol. Consequently, in 1982, 17 people joined this project with total land size of 17,000 acres spread across 35 villages.

While the project started in 1982, it was only in 1988-89 that the yield was ready. In the meanwhile, the Vasundhara Cooperative was registered in 1985 to provide value added services such as extracting pulp from raw mangoes, and preparing and marketing pickles. During the early 1990s, when activities started gaining momentum, the average yield was 4,200 tonnes of mangoes sold at Rs 5-8 per kilogram. By 1990, 5,500 farmers were a part of the wadi program.

Initially the tribals were reluctant as there were not enough employment opportunities besides paddy. "They were told that if they were getting Rs 25 per kilo for the mangoes, they could now get much more for the juice that would be made," says SE Pawar of BAIF. Not only was this program meant to increase the production of mangoes, through the wadi project tribals were given regular training on digging for sowing, layout of the fields, drying the land, etc. This was done through field guides appointed from among the villagers who were then trained by the BAIF staff.

In 1995 cashew was introduced in the wadi program and was grown along with mangoes in the ratio of 40:20. In this year the Germany-based development bank, Kreditanstalt für Wiederaufbau (KfW), also extended support to Vasundhara Cooperative in Dharampur and Kaprada blocks in South Gujarat's Valsad district to find employment opportunities for 10,000 families in these areas through the wadi program. To this end, 10 smaller cooperatives were formed that later merged with Vapcol. At the time, both these places were called red alert zones by the local banks as the default rates were very high and so farmers found it difficult to get credit. With this project, however, farmers were given credit to the tune of around Rs 5 crore, facilitated by BAIF's associate organization, Dhruva. The project impacted 12,000 families. The second phase started in 2003 and continues. It is aimed at 5,000 additional families in Dangla in Gujarat. An important aspect of KfW's involvement was a greater concentration on holistic development of the villages, be it in the form of wadis or facilitating oil processing from oilseeds by installing units locally.

All these initiatives were carried out by Vasundhara Cooperative until 2004, when Vapcol was established. In the 2000s, Vasundhara Cooperative had an annual turnover of Rs 3-3.5 crore. Later, when Vapcol was formed, the producer company appointed distributors in Dangle, Navsari, Valsad and Silvassa.

Interventions:

Vapcol started with a share capital of Rs 1 lakh and its two member cooperatives now have a membership base of 52 cooperatives. Each share costs Rs 100 and only cooperatives can become members of Vapcol.

- **Loans:** Member-cooperatives can take loans for their working capital requirements and for payments to farmers for their produce. In 2007 Vapcol reached out to farmers directly and started lending in small denominations of around Rs 5,000, with an excellent recovery rate of 92%. However, since that required a lot of administration, Vapcol decided to focus only on institutional finance and not target farmers individually.
- **Market Linkages:** Vapcol markets the finished products of cashew kernels and mangoes under the brand name Vrindavan, with cost-plus margin pricing. This margin is set at 6%. It sells to wholesalers and retailers, and directly to consumers through its own outlets. Produce is also supplied to institutional buyers such as Indian Tobacco Company, Anand Milk Union Limited (AMUL), and Surat Milk Union Limited. The Vrindavan brand is promoted through exhibitions, fairs, local magazines, glow sign boards, brochures, wall paintings, outlet promotion, a website, and word of mouth.

For 2011-2012, Vapcol's sales were Rs 4.4 crore, 90% contributed by cashew and the remaining by mangoes. For mangoes, Vapcol has forged an alliance with ITC that procures mangoes from the producer company; this could range from 190 tonnes to 900 tonnes in a good season. "Last year ITC did not procure from us as the export market has slowed down," says Sapate, CEO of Vapcol. Around 1,000 farmers are a part of this program by ITC. The order size for mangoes, commensurate with the demand and season, ranges from Rs 18 lakh to Rs 1 crore every season.

Impact:

- **Removing Middlemen:** Vapcol has ensured that farmers have an assured market for their produce and get a competitive rate for their produce, without any commission to middlemen. Unlike traders who alter the price of crops depending on demand and supply, Vapcol sets the price in the morning and maintains it through the day. Also the 8-10% commission of middlemen is eliminated.

Once Vapcol started engaging with people in the Agricultural Produce Market Committee (APMC), the marketing board established by the government of India, traders at the mandis felt that with a cooperative entering the market, the price of certain commodities was likely to go up at least by Rs 4 per kilogram due to bulk buying, etc. Earlier regular haats (local bazaars) used to take place where a big trader would sell small amounts to other smaller traders who in turn would sell to small farmers.

This big trader would set the price of the produce as he chose and would pay the smaller traders commission depending on how much the latter were able to offload to the farmers. Additionally, in Dharampur farmers who were unsatisfied with the weighing of their produce, have been given weighing scales to do their own weighing and so are much happier being a part of the cooperative that deals with Vapcol.

- **Timely Payment to the Farmers:** Importantly, farmers are paid by cash by the second day of procurement of the crop if produce is less than Rs 5,000 in value. For a higher amount, a cheque is issued to the farmer.

Challenges:

- **Rehabilitation of Tribals:** Due to the scale of the problem, rehabilitation of tribals is a big concern for Vapcol. More than 100 billion tribal people representing 250 communities in India have been deprived of opportunities for their livelihood as a result of severe denudation of forest resources on which they were dependent.

- **Strengthening Market Linkages:** Although Vapcol has managed to promote its retail brand Vrindavan, it still has a long way to go. Low levels of production largely due to high infrastructural, packaging and labeling costs restrict the producer company from expanding its retail presence.

Plans:

In the next 2-3 years, the Vapcol management aims to increase the membership base to up to 100 cooperatives. The Producer group also plans to strengthen the fair trade certification program it has started with Shop for Change that looks at marketing cooperative produce at fair price. So far Vapcol and Shop for Change have provided gift packets of cashew kernels to corporates such as DHL, Hexaware Technologies and Aditya Birla Group.

Koutla-B Mutually Aided Cooperative Society (MACS)

Founded: 12th June 2003

Founder: Cooperative promoted by BASIX

Region of Operation: Adilabad district, Andhra Pradesh

Kind of Organization: Cooperative Company

Structure of the organization:

- The society consists of 82 members currently.
- Nine of the 82 members are directors and include the President, Vice President and Secretary. The President of Koutla-B MACS is there since its inception.
- Every year MACS conducts election. It is mandatory to replace three directors with new directors.
- Each director has been assigned specific roles and responsibilities.
- A director's meeting is conducted on the 9th of every month.
- A general body meeting is conducted on the 10th of every month.

Addresses the high suicide rates among cotton farmers in India due to credit default for purchasing pesticides

Provides input facilities including pesticides, seeds, fertilizers etc. to members and non-member farmers in the surrounding villages

BASIX established inputs linkages, output linkages and crop advisory services for farmers. Due to unavailability of quality inputs in the village, backward linkage was established by stocking the entire range of inputs including, seeds, fertilizers, bio-pesticides, pesticides and farm equipments for members

Extension Services: BASIX installed a price display terminal of National Commodity Derivatives Exchange (NCDEX) in the village

Problem to be Solved

With severe pest infestation, cotton farmers in India tend to over-use pesticides and take high interest loans from money lenders to buy them on credit. When the yields are not high enough to repay debt, farmers become desperate and this is one of the major causes of cotton farmer suicides in India. To tackle this problem, particularly in Andhra Pradesh's Adilabad district, where cotton cultivation is the major source of livelihood for a large number of farmers, BASIX launched Koutla-B MACS.

About the Organization:

Koutla-B Mutually Aided Cooperative Society (MACS) is a producer's cooperative of farmers growing cotton. It was incorporated with 51 cotton-growing farmers in 2003 and had 82 members as of March 2011. Starting with a share value of Rs 1,000 per share/ member, it has graduated to the present estimated value of Rs 35,000 per share. Today the Koutla-B MACS has an annual turnover of over Rs 12 million.

After a number of farmer suicides in 2001, BASIX studied the problem and came to the conclusion that farmers were using chemical pesticides indiscriminately, borrowing in kind from pesticide dealers and losing heavily. In addition, farmers suffered from comparatively higher input costs, lower price realization and fluctuating prices. As a pilot project, BASIX started an intervention on Integrated Pest Management (IPM) in cotton in Adilabad district in 2002. As the next intervention on IPM, BASIX decided to target farmers with greater influence in the farming community. Hence, they focused their efforts on Koutla-B village, whose farmers were considered influential in the cotton growing community of the area. After learning about the success of the pilot project in other villages and visiting some of the farms participating in the pilot project, several young farmers in Koutla-B decided to join the IPM intervention.

Subsequently, in order to get access to low cost bio-inputs, BASIX convinced the farmers to create a village-level cotton-producers organization (the Koutla-B MACS). The idea was to collectivize farmers and obtain quantity discounts on the purchase of agricultural inputs, and eventually a better price for the sale of their produce as well. Eventually, dynamic younger farmers managed to convince a close-knit group of farmers to create the MACS with 51 members in 2003.

Interventions:

- **Providing Inputs:** Koutla-B MACS provides input facilities including pesticides, seeds and fertilizers to members and non-member farmers in the surrounding villages. Koutla-B MACS has obtained the licenses required from various reputed input companies and is now trying to get the dealership to sell all the agriculture related inputs from various companies such as Monsanto and Nuziveedu Seeds.
- **Market Linkages:** BASIX established inputs linkages, output linkages and crop advisory services for farmers. Due to the unavailability of quality inputs in the village, Koutla-B MACS began stocking the entire range of inputs including seeds, fertilizers, bio-pesticides, pesticides and farm equipment for members. BASIX motivated them to become dealers and later distributors for big input companies. This resulted in savings of 5 - 10 % on bulk purchase from dealers or directly from companies through better price negotiations.

As a next step, output linkages started with ginners and traders. The MACS initiative generated benefits for both members and non-member farmers, particularly with quality inputs at a reasonable price, where farmers saved about 5-10% on input costs. Ginning traders (cotton) pay a commission to MACS along with a better price than the market.

- **Extension Services:** On the price realization front, BASIX facilitated the installation of a price display terminal of the National Commodity Derivatives Exchange (NCDEX) in the village, which gave on-line information on cotton prices in both spot and futures markets.

Impact:

Through the various interventions described above, the producer cooperative has been able to get more acceptance among and increase its network of members. In 2003-04 there were 51 farmers in Koutla-B MACS; in 2011 there were 82. While savings increased by Rs 0.358 million between 2003-04 and 2010-11, turnover increased from Rs 55 lakh to Rs 4 crore and net profit from Rs 0.177 million to Rs 36 lakh in the same period.

- **Partnership with Agribusiness:** The producer cooperative sold agri-inputs at a small markup price (to cover its administration costs), which was lower than those at agri-input shops in the nearest town. Several major agri-input companies have now awarded dealer-status to the MACS store, with the appropriate margins. The community as a whole has now become aware of the costs of doing business with unscrupulous dealers, as well as the exorbitant rates that individual farmers are being charged on credit purchases. Further, availability of inputs in the village proved to be time saving for the farmers compared to the earlier option of going to the nearby town.
- **Removal of Middlemen:** Koutla-B MACS has also been able to remove middlemen, as a result of which farmers can get a 7 -10 % higher price than earlier. This case clearly indicates the collective bargaining power of farmers to gain competitive advantage.

Achievements of Koutla-B MACS

FINANCIAL YEAR	NO. OF FARMERS	SAVINGS AMOUNT (IN '000)	TURNOVER (RS IN MILLIONS)	NET PROFIT (RS IN MILLIONS)
2003-2004	51	31.6	5.5	0.177
2004-2005	81	149.6	8.1	0.73
2005-2006	82	197.6	6.8	0.61
2006-2007	83	245.6	8.1	0.88
2007-2008	83	277.2	10	1.4
2008-2009	82(45)*	293.6	19.6	1.4
2009-2010	82(45)*	341.6	31.4	2.4
2010-2011	82(45)*	389.6	40.5**	3.6**

*Temporary membership; ** Source: Unaudited financial statement

Challenges:

Competition: Initially the producer's cooperative faced a lot of resistance from local agri-input dealers as the former forged alliances with agribusinesses to distribute inputs. However, by staying united, they overcame the problem and now enjoy a good reputation in the market.

Plans:

The plans of Koutla-B MACS can be categorized into internal and external, as follows:

Internal:

- Plans to access venture capital fund for few years that can support the producer cooperative's activities and expand them in a more professional way.
- Needs to train Koutla-B MACS staff on Management Information System (MIS) to reduce dependency on outside sources.

External:

- Need to develop an institutional mechanism for price stabilization for accessing new low-volume and high-price commercial crops such as paprika chili, and medicinal and aromatic plants with considerable volatility in prices.
- Future plans include accessing funds from the Government and other development agencies.



Photo: Angan

Concluding Thoughts

This research analyzed the performance of the agricultural sector in India and key challenges affecting it. Agriculture's contribution to GDP has been steadily declining, from 30% in 1990-91 to less than 15% in 2011-12. Challenges within the sector such as a lack of extension services, inadequate market linkages, outdated infrastructure and socioeconomic factors including low literacy among farmers have contributed to this downturn. These macro-level challenges surface at the grassroots too as illustrated by a Dasra survey of 34 non-profits and social businesses working closely with small producers.

The report further analyses the agricultural value chain and depicts the disadvantaged position of small and marginal farmers, which prevents them from deriving the maximum benefits. Consequently, formation of producer groups has come up time and again as the best solution to the problems of small farmers as it provides economies of scale on both the input and output side. This alleviates the situation of small producers and is also an efficient way for agribusinesses to conduct business.

According to Dasra's findings, for philanthropy to create the maximum impact in alleviating the situation of small producers, it should complement public and private investment that aim to create business models, and sustainable change for small and marginal farmers. Also, philanthropy must be strategically directed toward solutions to agricultural problems, many of them capital intensive in nature requiring huge investments. Consequently, effective philanthropy would supplement programs by the private sector or undertake pilots to gauge the impact of interventions that provide sustainable alternatives.

Producer companies emerged as the central focus as far as a solution to challenges is concerned since these organizations provide an innovative structural framework to empower small and marginal farmers. They create economies of scale at the grassroots, smoothen supply chain inefficiencies, increase bargaining power, and facilitate stronger market linkages. This model has the potential to catalyze large-scale change for small and marginal farmers, who bear the double burden of constraints on both, the supply and the demand side. This farmer group forms a disproportionate percentage of Indian agriculture, which cannot be left out of India's growth not just on humanitarian grounds but also because they are the fulcrum of national food security.

As explored in our report, the need to invest different forms of capital in specific parts of the value chain remains critical. Being a state subject of significant importance, improved government intervention in the sector is a necessity. Increased participation of the private sector to promote efficiencies and market linkage is equally required.

Concluding Thoughts

Dasra Recommends:

● **Strengthening the Role of Key Stakeholders:**

The government's role remains as an overarching enabler to provide a conducive policy environment thereby creating efficiencies in the value chain while preserving the interest of small producers. While the role of small producers reduces as one moves along the value chain, the presence of private players become stronger in post-harvest stage. Therefore, there is an urgent need for the private sector to step in and build infrastructure like cold chain networks and warehousing facilities that require huge investments.

● **Emphasize the Role of 'Producer Organizations':**

A glaring issue as regards small producers is that of multiplicity of middlemen who create inefficiencies within the value chain by taking away a bulk of the margins leaving farmers with diminishing returns. Producer organizations have come up as an effective way for farmers to interact directly with the private sector and gain access to markets. Owing to the large membership base, these producer organizations have the bargaining power and from agribusinesses' viewpoint, it becomes convenient to deal with many farmers through one organization rather than spreading their operations. The research also found that there were other challenges like lack of extension services and capacity building that farmers faced that could be addressed by these organizations.

● **Address Socio-Economic Gaps in the Countryside:**

Infrastructural issues like poor irrigation facilities and inadequate warehousing aside, there are a host of socio-economic issues that hamper the progress of the sector. Low literacy rates among farmers curbs their ability to take advantage of government schemes and extension services and access finance without getting duped. Women's role in agriculture remains understated as they are discriminated with regards title of land and equal wages despite the fact that women farmers can grow 30% more food if they have access to the same resources as men. The not-for profit sector can assist in this regard by helping build farmers' capacity and improve the conditions of women farmers through producer organizations, like mentioned above or by working directly with the community.

Appendices: A. Dasra Research Process

Assessment of the Agriculture Sector in the Country

- Dasra undertook a preliminary mapping of the agriculture sector based on secondary research, discussions with development experts, NPOs, government, producer groups and beneficiaries of NPOs
- Interventions by Non Profit Organizations were also mapped
- From a list of around 144 organizations, 34 participated in a survey conducted by Dasra to evaluate key challenges in the sector

Analysis of NPO Programs through the Survey

- Analyzed interventions undertaken by the organizations, challenges they faced and recommendations for key stakeholders such as the government, private sector and donor agencies.
- Identified gaps and opportunities for funding

Site Visits to Producer Companies

- Based on the needs of producer organizations as highlighted by the survey , Dasra met with the key personnel of 4 farmer-run companies to understand the history, evolution of programmes and scaling plans
- Interviewed and exchanged views with senior staff about programs and impact
- Conducted field visits to interact with the communities and witness on ground impact

Summary and Conclusions

- Evaluated the key findings and interventions by organizations
- Synthesized analysis and derived conclusions
- Developed recommendations for investment

Appendices: B. Glossary

Agriculture Value Chain:

This is a model of how raw materials are received as inputs, value is added to these through various processes, and finally the finished products are sold to customers.

APMC:

An Agricultural Produce Market Committee is a marketing board established by a state government of India.

Extension Services:

Application of scientific research and new knowledge to agricultural practices through farmer education

Food Security:

Is a measure of ensured access to essential nutrition through food availability, food access, and food use.

Green Revolution:

Refers to a series of research, development, and technology transfer initiatives that increased agriculture production around the world, beginning most markedly in the late 1960s.

Producer Groups:

Democratically-run, member-controlled enterprises that provides its members with economies-of-scale and market power which lower their costs of acquiring inputs, processing and marketing output, accessing information and accumulating capital and which leads directly to increases in small producer net incomes

Soil Depletion:

Sharp decrease in crop yields after continual cultivation of the same crops or frequent use of the same field

Appendices: C. Bibliography

Publications

- Jha B, Employment, Wages and Productivity in Indian Agriculture. Institute of Economic Growth, n.d
- Datta S, Sharma V, State of India's Livelihoods Report: The 4P Report, 2010
- Chand, et al, Controlling Food Inflation: Do Supermarkets Have a Role? Economic and Political Weekly, 2011
- Kaur R, Sharma M, Agricultural Subsidies in India Boon or Curse, IOSR Journal of Humanities and Social Science, Vol. 2: 40-46, 2011
- Sharma VP, Thaker H, Fertilizer Subsidy in India: Who are the Beneficiaries? Indian Institute of Management Ahmedabad, 2009
- Muralidhar BV et al, Globalization and Its Impact on Indian Agriculture: A Study of Farmers' Suicides in the State of Andhra Pradesh, Nepalese Journal of Public Policy and Governance, 2011
- Ashley C, Maxwell S, Rethinking Rural Development, Overseas Development Institute, 2001
- Jha R, Investment and Subsidies in Indian Agriculture, ASARC Working Paper, 2007
- FAO, Financial resource flows to agriculture: A review of data on government spending, official development assistance and foreign direct investment, ESA Working Paper No. 11-19, 2011
- Jain, et al, Features of Indian Economy as an Underdeveloped Economy, Microeconomics and Indian Economy, 2010
- Meurer M, In search for a Southern Welfare Paradigm The case of India. Work, Livelihood and Economic Security in the 21 century, ICDD Research Cluster 4.2., 2011
- FAO, Smallholder Farmers in India: Food Security and Agricultural Policy, 2002
- Genier C, et al, Corporate Social Responsibility in the Agrifood Sector: Harnessing Innovation for Sustainable Development, n.d
- Bill and Melinda Gates Foundation, Agricultural Development Strategy Overview, Global Development Program, 2011
- Livelihoods India Conference, Agriculture Based Livelihoods: Opportunities and Potential, 2010
- OECD, Promoting Pro-Poor Growth, 2006
- Murray EV, Producer Company Model - Current Status and Future Outlook: Opportunities for Bank Finance
- Chand R, India's National Agricultural Policy: A Critique
- Zhou Y, Reinventing agricultural extension to smallholders, Syngenta Foundation for Sustainable Agriculture
- Brooks S, et al, Silver Bullets, Grand Challenges and the New Philanthropy, STEPS Working Paper 24, 2009
- USAID, Partnerships for Innovation and Knowledge in Agriculture, 2011
- FAO, The Role of Women Producer Organizations in Agricultural Value Chains, 2011
- Kachru RP, Agro-Processing Industries in India—Growth, Status and Prospects
- Chand R, Raju SS, Instability in Indian Agriculture during Different Phases of Technology and
- Murthy D, et al, Marketing and PostHarvest Losses in Fruits: Its Implications on Availability and Economy, Indian Journal of Agricultural Economics, Vol.33, No.3, 2007
- Ghosh and Chand, Brains storming on “Livelihood Security of Marginal and Sub-marginal Farmers”, Concept Note/ Base Paper, 2012
- IFAD, Promoting Women's Leadership in Farmers' and Rural Producers' Organizations, 2010
- IFPRI, Innovation and Research by Private Agribusiness in India, Discussion Paper 01181, 2012

Appendices: C. Bibliography

- The World Bank, Improving Farmers' Access to Agricultural Insurance in India, Policy Research Working Paper, 5987, 2012
- Lipton M, Can Small Farmers Survive, Prosper, or be the Key Channel to Cut Mass Poverty? e-Journal of Agricultural and Development Economics, Vol. 3: 58–85, 2006
- KPMG, Taming Food Inflation through Innovations in Agribusiness, 2011
- FAO, Financial resource flows to agriculture, ESA Working paper No. 11-19, 2011
- Ministry of Agriculture, Government of India, National Policy for Farmers, 2007
- Tandon HLS, Soil Nutrient Balance Sheets in India: Importance, Status, Issues, and Concerns, Better Crops-India, 2007
- Nagayets O, Small Farms: Current Status and Key Trends, Information Brief, 2005
- Bhalla GS and Singh G, Growth of Indian Agriculture: A District Level Study, Centre for the Study of Regional Development, Jawaharlal Nehru University, 2010
- Sainath P, Farm suicides: a 12-year saga, accessed online: <http://www.thehindu.com/opinion/columns/sainath/farm-suicides-a-12year-saga/article94324.ece?css=print>, 2010

Government Sources

- Dev M, Small Farmers in India: Challenges and Opportunities. Indira Gandhi Institute of Development Research, 2012
- Ministry of Agriculture, State of Indian Agriculture, 2011-2012
- Government of India, Report of Working Group on Warehousing Development and Regulation for the Twelfth Plan Period (2012-2017), 2011
- Policy, National Centre for Agricultural Economics and Policy Research, 2008

Appendices: D. Acknowledgements and Organization Database

Dasra would like to extend its sincere thanks to all the individuals, academics, experts, government officials and NPOs that have made invaluable contributions to its research and this report.

In particular: Dr. Anand Reddy, Mary Vattamattam, Murugessan S, P Sridhar Reddy, Dr. Peter Kenmore, Pratiche Kapoor, Rakesh Supkar, Seemantinee Khot, Siddharth Tata, Sunil Sabale, Vasumathi K, VB Dyasa and Vipin Sharma

A special thanks to the teams of all the organizations that participated in the research for this report:

Producer Organizations

Dharani FaAm Co

Koutla-B mutually aided cooperative society (MACS)

Uday Agriculture Producers Ltd Co.

Vasundhara Agri Horti Producer Company Ltd. (VAPCOL)

Appendices: E. Endnotes

- 1 Sainath, P (2012), Farm suicides rise in Maharashtra, State still leads the list, accessed online: www.thehindu.com/opinion/columns/sainath/article3595351.ece
- 2 Datta, S and Sharma, V (2010) State of India's Livelihoods Report: The 4P Report
- 3 State of Indian Agriculture 2011-2012, accessed online: <http://agricoop.nic.in/SIA111213312.pdf>
- 4 Jha, B (n.d.) Employment, Wages and Productivity in Indian Agriculture. Institute of Economic Growth
- 5 FAO (2002), Smallholder Farmers in India: Food Security and Agricultural Policy
- 6 Dev, M (2012), Small Farmers in India: Challenges and Opportunities. Indira Gandhi Institute of Development Research, Mumbai
- 7 Datta, S and Sharma, V (2010) State of India's Livelihoods Report: The 4P Report
- 8 Kaur, R and Sharma, M (2012) Agricultural Subsidies in India Boon or Curse. IOSR Journal of Humanities and Social Science
- 9 Sharma, VP and Thaker, H(2009) Fertilizer Subsidy in India: Who are the Beneficiaries? Indian Institute of Management Ahmedabad
- 10 Muralidhar, BV (2011) Globalization and Its Impact on Indian Agriculture: A Study of Farmers' Suicides in the State of Andhra Pradesh. Nepalese Journal of Public Policy and Governance
- 11 Ashley, C and Maxwell, S (2001) Rethinking Rural Development. Overseas Development Institute
- 12 Muralidhar, BV (2011) Globalization and Its Impact on Indian Agriculture: A Study of Farmers' Suicides in the State of Andhra Pradesh
- 13 Dev, M (2012), Small Farmers in India: Challenges and Opportunities. Indira Gandhi Institute of
- 14 Development Research, Mumbai
- 15 Datta, S and Sharma, V (2010) State of India's Livelihoods Report: The 4P Report
Chand et al (2011), Controlling Food Inflation: Do Supermarkets Have a Role?, Economic and Political Weekly
- 16 Meurer, M (2011) In search for a Southern Welfare Paradigm The case of India. ICDD Research Cluster 4.2. Work, Livelihood and Economic Security in the 21 century
- 17 Ashley, C and Maxwell, S (2001) Rethinking Rural Development. Overseas Development Institute
- 18 Ashley, C and Maxwell, S (2001) Rethinking Rural Development. Overseas Development Institute
- 19 Datta, S and Sharma, V (2010) State of India's Livelihoods Report: The 4P Report
- 20 Chand, R (n.d.) India's National Agricultural Policy: A Critique
- 21 Datta, S and Sharma, V (2010) State of India's Livelihoods Report: The 4P Report
- 22 Sainath, P (2010), Farm suicides: a 12-year saga, accessed online: www.thehindu.com/opinion/columns/sainath/farm-suicides-a-12year-saga/article94324.ece?css=print
- 23 Murray, EV (n.d.), Producer Company Model - Current Status and Future Outlook: Opportunities for Bank Finance
- 24 Vorley et al (2012), Small Producer Agency in the Globalized Market: Making Choices in a Changing World



Photo: Angan



catalyst for
social change