# Concerns of India's farmers

# K. Ravi Shankar and Pochaiah Maraty

Abstract: This paper provides a critical insight into the different factors responsible for indebtedness and feelings of distress among farmers in India. Natural factors (drought, cyclones and floods), along with institutional factors (inputs, credit, markets, etc), contribute to the capital dependence of farmers. The situation of small, marginal and large-scale farmers is discussed. After elaborating on the existing conditions, the authors suggest measures that could be taken by government and offer recommendations for overcoming the crisis, such as forming farmers' groups, reducing input costs by adopting non-pesticidal management, rectifying market anomalies and providing counselling and confidence-building measures in distress 'hot spots'.

Keywords: farmers; farmers' indebtedness; farm credit; farmers' groups; India

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Agriculture accounts for 22% of India's total gross domestic product (GDP) and provides livelihoods for 58% of its population. Agriculture is a way of life, a tradition, which for centuries has shaped the thinking, outlook, culture and economic life of the people of India. It is characterized by the predominance of small and marginal farmers. India is one of the world's largest producers of farm commodities. Its different agroclimatic regions make it well suited to producing different varieties of fruits and vegetables almost all year round. In spite of the huge potential, Indian agriculture is constrained by several issues. In particular, the current investment in agriculture is only 1.3% of total GDP. Reports of farming crises are widespread.

### History of Indian agriculture

Indian agriculture has long been characterized by famine, drought and food shortages. Between 1770 and 1880, as many as 27 food scarcities and famines were recorded.¹ Soon after independence in 1947, India began to seek food aid, and in 1951, India received *ad hoc* assistance of two million tonnes of food grain to tide the country over the crisis arising from severe drought in several areas. In 1966–67, the critical year of drought, India imported 11 million tonnes of food grain. Hence, the focus of Indian agriculture after independence remained on production and productivity of food grains to meet the increasing demands of a growing population.

In most industrial nations, the introduction of

mechanization and other such technologies into the countryside has been accompanied by a gradual reduction in the rural population.<sup>2</sup> This did not happen in India and there were wide economic and social implications. What we are witnessing today is a structural transformation of agriculture from famine conditions to achieving self-sufficiency and the opening up of a market to global competition.

### Agricultural lending institutions

Rural finance was mainly in the form of moneylending. Land was abundant, but payment of taxes in cash was difficult, thus forcing farmers to produce for the market and generate cash incomes. Moneylenders, the ruling class of landlords and officials used to collect revenue from farmers, kept some of it and transferred the major portion to the government. If taxes were not paid, farmers were punished by being used as bonded labour, suffering enslavement and even death for acting against the government. Thus farmers were dispossessed of their occupancy rights, which were converted to rights of tax collection, which became inheritable and mortgageable.

Credit institutions serving agricultural-sector needs in India developed in three phases. In the first phase, which lasted from 1947 to 1969, cooperative agencies were the primary vehicle providing credit. In the second phase, after nationalization of the banks in 1969, commercial banks were assigned a role in providing agricultural credit, but were supplementary to cooperatives. In the last

Table 1. Indebtedness of farmers' households (by state and for all India).

S No Indicators	Maharashtra	Andhra Pradesh	Kerala	Punjab	All India
<ol> <li>Percentage of farmers' households indebted</li> <li>Percentage of indebted farmers' households with</li> </ol>	54.8	82.0	64.4	65.4	48.6
cultivation as main income	62.6	54.4	14.4	52.7	56.9

Source: National Sample Survey Organization, 2005b.

Table 2. Distribution of indebted farmers' households according to landholding.

S No	Indicators	Maharashtra	Andhra Pradesh	Kerala	Punjab	All India
1.	< 1 ha	36.0	55.7	87.7	53.3	61.0
2.	1–2 ha	26.2	21.8	9.1	15.8	18.9
3.	> 2 ha	37.9	22.4	3.2	31.0	20.1

Source: National Sample Survey Organization, 2005b.

phase starting in 1975, regional rural banks were established to provide credit. The banking system failed to attain its objective of reaching the rural poor because the emphasis was on production loans; transaction costs for lenders and borrowers were prohibitive; there was a failure to mobilize savings; and procedures were excessively complicated. The stress was on institutional diversity rather than institutional viability (Seibel, 2005).

With liberalization came competition, and cost-cutting became essential for banks if they were to survive. Rural branches are not easy to run. The transaction costs are high relative to the low loan amounts, and repayment is poor. All these factors meant that profit-conscious banks could ill-afford expansion into rural India. Thus, branch expansion, and with it, the growth of institutional rural credit, slowed. This led to the resurgence of the moneylender and the maintenance of low-quantity and -quality credit systems in rural India (Phadke, 2006).

### Existing conditions and consequences

An overview of the factors causing farmers' distress would reveal many causes – natural, institutional and social. But the important one appears to be the rising indebtedness accrued from repeated crop failures, plus the mounting costs of cultivation. Studies in various states of India have identified an unbearable debt burden as the main reason for farmers' suicides (Pramod Kumar and Sharma, 1998; Vasavi, 1999; Chowdhary, 2002; Vidyasagar and Suman Chandra, 2003). For example, from a sample of 111 farmers, the risk factor associated with suicide was highest for indebtedness (86%), followed by a fall in economic standing (74%) (Srijit Mishra, 2006).

From Table 1 it is evident that nearly half of India's farming households were in debt in 2005, and more than half of them were dependent on agriculture as their main source of income. The indebtedness was highest in Andhra Pradesh.

Table 2 indicates that those farmers holding less than one hectare of land were the most heavily indebted, followed by those with more than two hectares, then those with one to two hectares. Kerala tops the list with the highest percentage of indebted farm households having less than one hectare of land; 47% of suicides from the Wayanad region of Kerala were farmers occupying less than one acre of land (Mohana Kumar and Sharma, 2006).

The loans of indebted farmers included those for capital expenditure (30.6%), current expenditure (27.8%) and non-farm expenditure (6.7% of an outstanding debt of Rs12,585 for each household). About 75% of the farmers spent less than Rs615 each month on per capita consumer expenditure (National Sample Survey Organisation, 2005b,c).

Drought is a natural calamity that has long-term effects. Soil fertility and moisture content are affected. Water storage is depleted and groundwater is not recharged. The ground may then become too dry for sowing, and migration is the only solution. Depletion of groundwater resources in the rural areas has reached a peak. Farmers have repeatedly made heavy investments in borewells, which failed. Between 1975 and 1999, the numbers of borewells increased from 820,000 to 2,222,000 over an area that increased from 1 million to 2.6 million ha. Despite the advent of new technologies in water lifting, the area irrigated per well has fallen from 1.22 acres to 1.19 acres, indicating declining water yields (Ratna Reddy, 2003). Half of the area under irrigation in Andhra Pradesh is supplied from groundwater resources and 63% of the groundwater is drawn via boreholes (Narasimha Rao and Suri, 2006). On the other hand, crop damage due to heavy rains and floods has been seen in recent years in many states including Andhra Pradesh, Karnataka, Maharashtra and Rajasthan.

Farming revolves around five essential *institutional* factors – inputs, credit, market, insurance and

government support. Inputs have become costly and poor in quality: 51% of the farmers in Andhra Pradesh replace seed varieties every year (National Sample Survey Organisation, 2005a). Andhra Pradesh has the highest consumption of pesticides per unit of output, and second highest (next to Punjab) in consumption of fertilizers (Government of Andhra Pradesh, 2005). There is a mismatch between input costs and prices obtained. There has been a spate of seed agencies and dealers who have established their businesses with the sole intention of defrauding farmers. In some areas, farmers have allowed their land to be used as experimental plots by private research and development companies for testing new business opportunities.

Formal funding mechanisms and systems meet about 25% of the total credit requirements of the state's farmers. The overall credit supply to agriculture from the private sector stands at 75%. Interest rates charged by private moneylenders can range from 24% to 60%. Furthermore, the moneylender may continue to wield influence both as a supplier of inputs and a retailer of outputs. Instances of local moneylenders supplying spurious seeds and pesticides are often reported. Tenant farmers are not eligible to secure institutional credit or any compensation for crops lost due to cyclones causing inundation during monsoons. They have no documents that recognize their rights as cultivators. Absence of liquid capital is a major problem faced by farmers.

It is worth mentioning here the several structural and social factors leading to the capital dependence of farmers. With the advent of the green revolution, farmers initially benefited from increases in productivity, but soon realized the need to invest heavily in inputs. Agriculture became a cash-based individual enterprise requiring huge investments in modern inputs and wages. A farmer had thus to draw on more credit to cultivate the land (Suri, 2006). With the onset of liberalization, changes in the pattern of landholdings became evident, as did the shift from light to cash crops; the growing costs of cultivation; volatility of output; market fluctuations; lack of remunerative prices; and the decline in public investment. Gross fixed capital investment in agriculture as a proportion of GDP declined from 3.1% in the early 80s (1980–85) to 1.6% in 1997–2002. During the same period, gross fixed capital formation in agriculture as a proportion of total gross fixed capital investment declined from 13.1% to 7.4% (Committee on Capital Formation in Agriculture, 2005).

Post-liberalization, markets have become volatile along with falling output prices. Syndicates of private agencies suppress the market prices of crops such as tobacco and chillies, as has been seen in the Prakasam and Guntur districts of Andhra Pradesh state. 'Distress' sales of paddy by farmers in the fields constitute another example of containment of real prices. The minimum support price should be greater than the cost of production. Government intervention in the form of support prices requires revision. Consideration of the data regarding minimum support prices (from 1996–2004) for paddy, bajra, groundnut, cotton, wheat and sugarcane, etc (Tata Institute of Social Sciences – TISS, 2005) showed that the cost of cultivation and support prices did not match.

The pressure of high social expenditure, for instance,

on marriages, has increased the burden on the farmer (Swaminathan, 2006). Harassment by private moneylenders continues to be an important social problem faced by farmers (the social pressure of debts). The lives of farmers are being increasingly governed by loans taken out mainly to support their farming activities. The mounting number of farmers' suicides is a great tragedy and a matter of deep concern.

# Measures taken

The following measures have been taken to address the above problems:

- (1) A 15.7% hike in the Central Plan outlay for agriculture and allied activities was announced for 2007–08.
- (2) Increased investment of up to 2% of GDP has been made in agriculture and allied activities.
- (3) With the country's agricultural sector growing at only 2.6%, India's budget for 2007–08³ proposed a target of Rs225,000 crore (10³) for agricultural credit under the institutional credit system, covering an additional 50 lakh (10⁵) Indian farmers.
- (4) The provision of Rs1,677 crore was made for a 2% interest subvention on short-term crop loans to farmers.
- (5) A special plan is to be implemented over three years in 31 particularly distressed districts in four states involving an amount of Rs16,979 crore.
- (6) Regional rural banks are to open up more branches.
- (7) Interest waivers and debt restructuring along with a loan moratorium period (six months to one year) have been extended to farmers.
- (8) A separate allocation for tenant farmers has been introduced to ensure that they obtain their fair share of loans.
- (9) Rs153 crore has been allocated for the induction of high-yielding milch animals.
- (10) Rs11,000 crore has been allocated for irrigation schemes and Rs3,983 crore for rural electrification.
- (11) A 100% subsidy has been introduced for small and marginal farmers and a 50% subsidy for other farmers for underground water recharging programmes.
- (12) A seed development programme has been established for the production of pulses.
- (13) The National Rainfed Area Authority has been established with the provision of Rs100 crore to coordinate all schemes relating to watershed development and other aspects of land use.
- (14) The Indian Council of Agricultural Research (ICAR) is to set up one teaching-cum-demonstration model of water harvesting in each of the 32 selected State Agricultural Universities and ICAR Institutes each will train 100 trainers and 1,000 farmers.
- (15) To revive extension work, the Agricultural Technology Management Agency is to be extended from the current 262 districts to another 300 districts.
- (16) Rs22,452 crore has been allocated as a fertilizer subsidy, and a pilot scheme is under way in at least one district of each state for the direct payment of the subsidy to farmers.

- (17) The National Agricultural Insurance Scheme (NAIS) was continued in 2007–08 with the provision of Rs500 crore.
- (18) A weather-based crop insurance scheme has been started as an alternative to NAIS.
- (19) The Corpus of Rural Infrastructure Development Fund has been increased from Rs10,000 to 12,000
- (20) A new scheme called 'Aam Admi Bima Yojana' was introduced for death and disability insurance cover through the Life Insurance Corporation of India for rural landless households.
- (21) A National Fisheries Development Board has been established.
- (22) The Rs1,189.99 crore National Agricultural Innovation Project has been approved, with 75% funding from the World Bank, which will facilitate research on production-to-consumption systems and sustainable rural livelihood security, as well as basic and strategic research in the agricultural sciences.
- (23) Curbs have been placed on futures trading in rice and wheat and a panel was established to study the impact of forward trading on commodity prices.

## Recommendations

The approach should be holistic, coordinated and integrative:

- Forming farmers' groups along the lines of self-help groups (SHGs) provides a practical shape to the programme. Successful social interventions of some watershed programmes (for example, Ralegan Siddhi in Maharashtra) in a participatory mode also provide examples for organizing groups. Local women's institutions such as savings groups are ideal channels for purchasing inputs and marketing outputs.
- Village seed programmes need to be strengthened.
  Legislation to enable the availability of good quality
  seeds, fertilizers and pesticides is essential. Punishment
  for sale and supply of poor-quality seeds and
  adulterated pesticides should be stringent and coercive.
- Non-pesticidal management (NPM) needs to be propagated on a large scale, as evidenced by reports from successful practising farmers (Sopan Joshi, 2006). The typical expenditure on crop protection per acre of red gram (pigeon pea) of a farmer, Mr Venkataiah, from Kosgi Mandal, Mehboobnagar district, Andhra Pradesh, serves as an example – see Table 3.
- Substantial institutional lending with flexible repayment schedules, as announced by the government, is a critical need.
- Non-governmental organizations (NGOs) are already involved in facilitating self-help groups (SHGs). SHGbased micro-finance provides for the inclusion of the rural poor while keeping the cost of lending low. NGOs and local SHGs should be encouraged to act as pressure groups to regulate private moneylenders (Srijit Mishra, 2006).
- Market anomalies can be rectified by encouraging the development of competitive agricultural markets in the private and cooperative sectors, preventing distress

Table 3. Expenditure on crop protection – a real-life example.

#### (a) With pesticides

Endosulfan – Rs500 Endoseal – Rs400 Gamaxine – Rs700 Tracer – Rs1,060

Total -Rs2,660

#### (b) With non-pesticidal management

Neem and other NPM inputs – Rs140 Pheromone traps – Rs30 Chilli powder – Rs20 Garlic – Rs20 Kerosene – Rs10 Miscellaneous – Rs80

Total - Rs300

Result of non-pesticidal management: expenditure was reduced by Rs2,360 per acre.

- sales by farmers and promoting private investment in marketing infrastructures. Good marketing networks can reduce transaction costs. They can also provide non-farm employment opportunities with linkages (Srijit Mishra, 2006).
- Variable import and export tariffs that protect domestic prices against volatility in international prices could be of help to both producers and consumers (Ghosh, 2005).
- Agricultural policy should be calibrated to diversify cropping/activity patterns in line with domestic and external demands and production. Close coordination between marketing and horticulture departments is essential to regulate overproduction of crops such as tomato, onion and cabbage. This helps in preventing damaging price falls (Report of Jai Kisan, Etv 2 TV channel).
- A well designed, low-cost life, crop and livestock insurance system covering both personal and production risks of farmers is to be put in place.
- Using farm households (plot- or land-specific) rather than the mandal (group of villages) or village as a unit in providing insurance will be of much benefit.
- Extension functions are to be strengthened because it is only by education that farmers can be made aware of the need for 'low-cost, high-quality' farming. Local NGOs can also be involved in facilitating agricultural extension (Srijit Mishra, 2006).
- Information and communication technologies provide understanding and opportunities to farmers regarding international trade in agricultural products, issues arising out of conditionality and the lower import duties, etc of the World Trade Organization (WTO).
- Government compensation for suicide victims should be offered as a priority. The criteria for compensation should be clear, unambiguous and should minimize the scope for subjective interpretation. Legal ownership of land should not be the only criterion for considering an individual as a farmer (Srijit Mishra, 2006).
- · Social sector needs such as health, education, infra-

- structure and transportation need to be improved to reduce the credit requirements of farmers.
- Farmers involved in social turmoil need to be counselled and placated. Counselling centres for farmers should be set up immediately in distress hot spots (Swaminathan, 2006). Confidence-building measures are to be initiated. Family, friends, relatives and society at large have a responsibility in preventing farmers' suicides. In this context, the efforts of individuals, government, NGOs and voluntary organizations need to complement each other.

#### **Conclusions**

The tragedy of farmers committing suicide highlights some of the social and ecological costs that are linked to the globalization of non-sustainable agriculture. But these are not crop-specific and have been experienced in all regions where there are commercially grown and chemically farmed crops (Shiva *et al*, 1999). Public investment, credit, improvements in infrastructure (such as the development of roads, transport and agroprocessing), stable markets and knowledge transformation of farmers are the five pillars upon which agrarian prosperity and rural development can be built. The real challenge of our times lies in making agriculture a worthwhile and decent proposition as a livelihood.

#### **Notes**

- $^{1}\ \ Website:\ http://www.infochangeindia.org/AgricultureIbp.jsp.$
- Website: http://india\_resource.tripod.com/ indianagriculture.html.
- <sup>3</sup> Website: http://Indiabudget.nic.in.

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