

# Strengthening Indian agriculture and ensuring farmers' welfare: approaches and strategies

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This brief describes the main problems in the agricultural sector in India and highlight means to tackle such challenges and make farming a viable proposition.

## 1. Agricultural Credit and Insurance

Lack of access to cheap credit is one of the primary reasons behind distress suicides by farmers. The business of crop lending is usually controlled by local moneylenders and middlemen, who charge usurious rates of interest on their loans to farmers. This leads to a mounting burden of debt on the farmer, and also discourages investment in farm inputs which can increase productivity.

### Strategies

The problem can be addressed by providing farmers access to cheap loans through a robust institutional mechanism

- The interest subvention scheme for short-term crop loans will be continued under the new Central government as well, and an announcement for the same was made in Union Budget in July 2014. Under this scheme, state-owned banks extend loans to farmers at an interest rate of 7%, which is further brought down to 4% on prompt repayment of loans
- **Joint Farming Groups:** Often, small and marginal farmers are unable to access institutional loans due to lack of adequate collateral. This makes farming unviable for many of these farmers unless they turn to local moneylenders and middlemen. It is therefore important to mobilize such small farmers in the form of joint farming groups. This can help in multiple ways, as listed below:
  - The farmers would get easier access to finance
  - Pooling together of land and other resources would bring about economies of scale and make farming more viable.
  - Farmers' collectives can also be encouraged to directly sell their produce in the open market, without relying on middlemen in the supply chain. This would ensure that farmers get a good return for their produce.

Apart from short-term debt, there is also a need to focus on providing long-term credit to agriculture to promote investments and innovation. This could lead to greater mechanization of agriculture, and eventually greater productivity.

- Effective crop insurance policies:

In the 12<sup>th</sup> plan, a Central Sector Scheme of **National Crop Insurance Programme (NCIP) / Rashtriya Fasal Bima Karyakram (RFBK)** has been formulated by merging Modified National Agriculture Insurance Scheme, Weather-Based Crop Insurance Scheme, and Coconut Palm Insurance Scheme. In the

### Component I – Modified National Agricultural Insurance Scheme- Salient Features

- **Crops Covered-** Food Crops (Cereals, Millets and Pulses), Oilseeds, horticultural crops.
- **Beneficiaries-** All farmers including sharecroppers, tenant farmers, individual owners, farmers enrolled under contract farming, along with groups of farmers serviced by Self Help Groups, NGOs.
- **Insurance Company-** Selection of insurance companies will be done by State Governments.

- **Risks covered-** Natural fire and lightning, storms/hailstorms/cyclones, floods, landslides, Droughts/ Dry Spells, Pests/ Diseases.
- **Sum insured-** The sum insured is generally equivalent to the product of notional threshold yield (fixed by the insurance company) and the minimum support price/ farm gate price.
- **Premium and Subsidies-** Before the start of each crop season insurance companies will work out premium rates for each crop through standard actuarial methodology approved by the government. There would be different rates of subsidy on premium for different premium rates

## 2. Agricultural Diversification

Often, cultivation of a single crop over vast tracts of land exposes farmers to greater risk of crop failure and indebtedness in case of drought, floods, and pest attacks. For example, in Yavatmal, a district infamous for farmer suicides, many farmers have been cultivating only cotton in anticipation of higher yields and higher prices for their produce. However, in times of poor yields or lower prices in the market, farmers do not have any other source to supplement their meager incomes.

### Strategy

It is here that diversification can be an effective approach to mitigate agricultural risks and improve agricultural productivity. Some of the ways in which agricultural diversification can be practiced are:

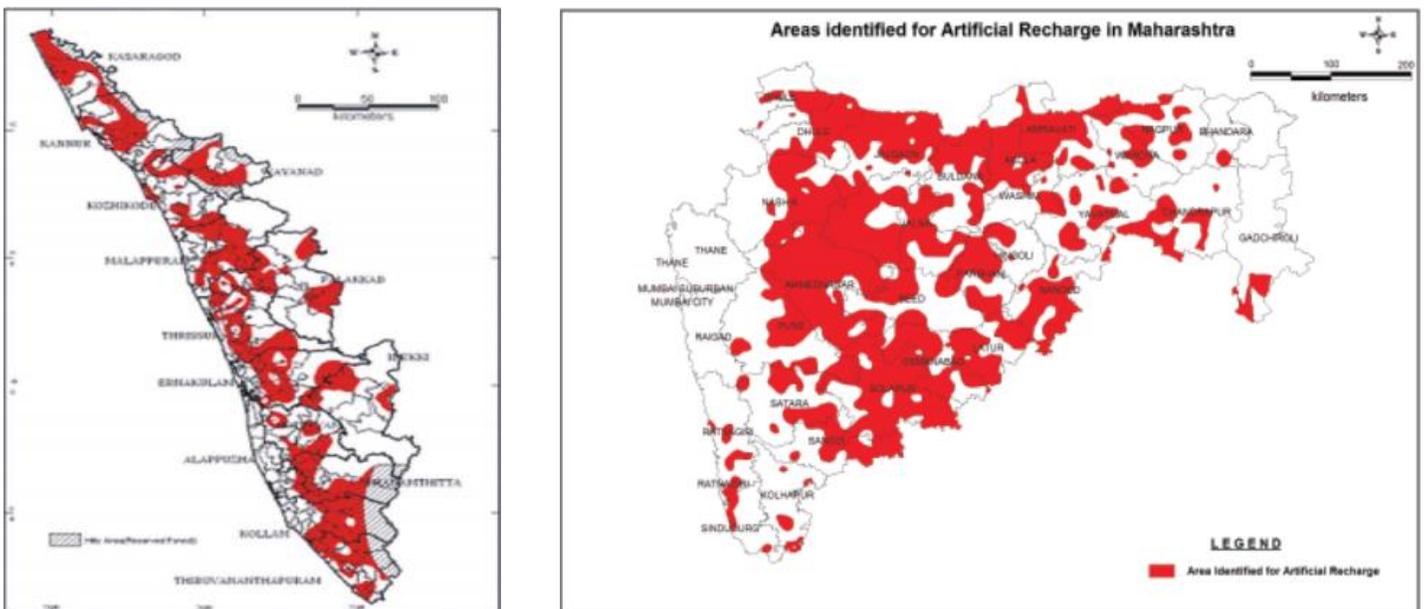
- **Crop diversification:** There needs to be a greater focus on growing crops like *jowar* and *bajra*, which are much more resistant to drought as compared to cotton and soybean. There should also be greater cultivation in the rabi season. Wheat cultivation can be taken up in this period.  
Under the National Mission on Sustainable Agriculture (NMSA) of the Ministry of Agriculture, Government of India, assistance is provided for evolving sustainable cropping systems such oilseed, fiber, cereal and pulse-based systems.
- **Diversification into animal husbandry:** Animal husbandry can be a useful way to supplement agricultural incomes. The input costs are relatively low, and it is much less physically demanding as compared to agriculture. Thus, rural women can also take up livestock rearing as a viable activity.  
To give a boost to the livestock sector, the Government of India launched the National Programme for Dairy Development. The 1<sup>st</sup> phase of this 15-year project was launched in 2012 with assistance from the World Bank (International Development Association). The programme is implemented through end-implementing agencies (EIAs) which include State Cooperative Dairy Federations, State Livestock Development Board, District Cooperative Milk Producers' Unions, producer companies. The salient features are:
  - EIAs are eligible for assistance if they meet institutional/governance, financial and technical eligibility criteria as laid down under the Scheme.
  - The 3 main Components under the Scheme include i) **productivity enhancement**, ii) **strengthening village-based milk procurement systems**, and iii) **project management and learning**
  - 100% grants-in-aid are available for nutrition and breeding activities.
  - 25% of the project cost of capital expenditure (50% in case of village-based milk procurement systems) in case of new semen stations would be borne by the EIAs, the rest being subsidized by the government.

## 3. Effective water management

In drought-prone and rain-fed regions, judicious and economical use of water becomes critical for sustainable agriculture and farmers' welfare. Several strategies for water conservation have been successfully adopted in various parts of the country. Some of these are mentioned below:

- **Groundwater recharge:** Artificial Recharge aims at augmentation of groundwater resources by modifying the natural movement of surface water utilizing suitable civil construction techniques. Various structures enable the recharge of ground water such as percolation tanks, dug wells, injection wells, recharge shafts, etc. The structures help utilize the rainfall runoff and help restore depleting aquifer systems.

The **Master Plan for Artificial Recharge to Ground Water in India, 2013** is the blueprint prepared by the Central Groundwater Board (CGWB) based on which recharge structures will be constructed across districts by the Board. A total area of about 941541 sq.km. has been identified in various parts of country under the Master Plan, where artificial recharge to ground water is feasible. This also includes “hilly terrain of Jammu and Kashmir, Himachal Pradesh, Uttarakhand, North Eastern States & Islands where the structures are proposed to improve the sustainability of springs and freshwater”. The figures below are a snapshot of areas identified for artificial recharge in the states of Kerala and Maharashtra



Source: Master Plan for Artificial Groundwater Recharge in India - 2013

- **Micro-irrigation:** Micro-irrigation refers to the application of irrigation water directly to the root of plants, especially horticultural plants. Micro-irrigation offers several advantages such as water conservation, retention of soil fertility and increase in agricultural productivity. The Central government offers incentives for micro-irrigation under several schemes such as NMSA (as mentioned above), and National Food Security Mission (NFSM)
- **Constructing water-conservation structures under NREGA:** The Central Government has already announced that a greater push would be given to activities under NREGA which enhance agricultural productivity. One way of doing this would be to create water conservation structures such as tanks, wells and percolation tanks in drought-prone areas This can help small and marginal farmers in 2 ways:
  - *Firstly*, water conservation could improve agricultural yields and make agriculture more viable
  - *Secondly*, NREGA could provide an *additional source of income* for the farmers' household, thereby mitigating any short-term financial distress.

#### 4. Linking farmers to markets

Cheap and easy access to markets ensures that a farmer gets a good price for his produce. In the absence of such access, farmers may be forced to sell his produce to middlemen in distress, which may not bring him remunerative returns. To encourage direct access to markets, farmers could be encouraged to sell their produce such as soybean and pulses directly in the market by mobilizing them in the Farmer Producer Organizations (FPOs). Such FPOs can access loans from banks and other lending institutions (as mentioned earlier) and directly sell their produce in the open market.

Primary processing facilities in the vicinity of the farm can also add to the quality of farm produce and increase its value. Farmer Producer Organizations (FPOs) can also set up such primary processing units with adequate financial support from the state.

It is therefore important to address the problem of farmer suicides from a more holistic perspective. Every aspect of the agricultural supply chain from land to the market needs to be studied, and suitable solutions devised for each village/farm with similar characteristics and problems. Some of the strategies and approaches mentioned in this brief could be utilized to improve farmers' social and economic conditions. This can be the only long-term solution to the problem.

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