# Sources of Agricultural Loans in India

Agricultural credit in India is available to farmers and other people working in the farming sector in India from various sources. Short and medium term agricultural credit requirements of farmers and others employed in the agricultural sector in India are usually met by the government, money lenders, and co-operative credit societies. Farmers with long-term loan requirements, such as a long-term agri loan or a loan for agri land purchase, can avail of loans from land development banks, the Indian government, and money lenders.

The National Bank for Agricultural and Rural Development (NABARD) provides long-term and short-term credit to service the needs of Indian farmers at highly competitive interest rates.

The sources of agricultural finance in India can be classified into two main categories, i.e., institutional and non-institutional sources.

**Non-institutional sources**, constitute around 40 percent of total credit availed by farmers in India. The interest rate of the non-institutional agri loans is usually very high, although the land or other assets are kept as collateral in the secured loans. include entities like relatives, landlords, traders, commission agents, and money lenders. On the other hand, institutional sources include entities such as co-operatives, NABARD, and commercial banks like the RBI and SBI Group.

In the following section, the various institutional sources of agriculture business loan or agriculture loan are discussed briefly.

**Institutional sources**

The key goal of institutional credit is to enable farmers to increase their agricultural productivity and, as a consequence, their income. Institutional credit doesn't employ exploitative practices. Some of the main institutional sources of agricultural finance in India are listed below.

**a. Co-operative credit societies**

Co-operative credit societies are the best and cheapest sources of agriculture business loan in India. The active Primary Agricultural Credit Societies (PACS) in India account for almost 86% of all Indian villages and makeup over 36% of the total rural populace in the country

**b. Government**

The government is another valuable provider of agricultural finance in India. Agricultural finance available from the Government of India are called taccavi loans and these are usually disbursed during times of emergency, such as when floods or famine occur. Interest rates on these loans are also very low.

**c. Regional rural banks**

Regional rural banks or RRBs have been providing direct loans to agricultural labourers, small and marginal farmers, as well as rural artisans, among others since 1975 for productive purposes.

**d. Commercial Banks**

Commercial banks have played a marginal role in providing rural finance. After the nationalization of commercial banks in 1969, these banks began to provide both direct and indirect agri loans for short and medium term durations.

**e. Land development banks**

These provide both medium and long-term agri business loans against a collateral of land that acts as a security. The duration of these agri business loan is usually 5–20 years with a high loan quantum.

To reduce the exploitation of farmers and enable their growth the government has made many initiatives, encouraging banks and NBFCs to offer the rural farmers agri business loans at competitive interest rates. However, an increase in the awareness and education about the benefits of institutional financing are important for effective acceptance of the institutional credit in rural areas.

## SHORT NOTES ON LAND DEVELOPMENT BANKS (LDBS)

The long-term finance required by the agriculturists for the purchase of agricultural machinery and for effecting permanent improvements on land cannot be provided by commercial banks and co-operative banks for the reason that these institutions obtain most of their funds in the shape of short-term deposits.

The necessity therefore has arisen for the establishment of the institutions with the object of providing long-term credit to agriculturists at moderate rates of interest and providing for the

repayment of loans in easy annual or semiannual installments spread over a number of years. These institutions are the Land Development Banks.

Land Development Banks have developed a special technique for conducting their business. They obtain their funds, not in the shape of short-term deposits like commercial banks but by the issue of long dated debentures sometimes carrying State Government guarantee with regard to payment of interest and repayment of principal.

Thus, they are able to lend their money for long periods to agriculturists. On account of their importance to the nation they enjoyed special powers for the recovery of defaulted loans, exemption from taxes and in some cases state guarantee for these bonds.

Land Development Banks differ from one another in their functions and their constitution. Some Land Development Banks specialize in providing fund against agricultural properties; some continue their business to advancing loans against urban properties, some advance loans to public bodies and municipalities.

Some have combined all these different kinds of functions. Land Development Banks also differ from one another in their constitutions. Some are organized on co-operative basis, some on joint stock basis and some on quasi co-operative basis, incorporating the co-operative and joint stock principles.

**Land Development Banks in India**

Land Development Banks in India are of quasi-commercial type. Although they are all registered under the Co-operative Societies Act, they are associations of borrowers as well as non-borrowers organised on the principle of limited liability.

The borrowing capacity of a member is generally determined according to the number of shares he holds in the bank, though each member has only one vote according to co-operative principle, irrespective of the number of shares he holds.

**Co-operative Banking in India**

Even though the first Land Development Bank was started in Punjab in 1920, the real progress began when the Land Development Bank was established in Chennai in 1929. The Land Development Banks are Co-operative Institutions established ore limited liability principle with borrowers and non-borrowers as members to supply long-term capital against development of land and building. Capital

The Land Development Banks derive their funds from share capital reserves, deposits and debentures. The debentures, which account for most part of the funds on the bank, may be issued by the banks themselves or by the State Co-operative Banks on their behalf.

They are subscribed for by the public or the Government in some cases, the principal and interest of these debentures are guaranteed by the Government.

In Mumbai and Chennai Central Land Development Banks were established to finance Primary Land Development Banks by centralized debenture issues. These debentures are classified as trustee securities.

**Loans and Advances**

The loans granted by land development banks are repayable within 20 to 30 years. Normally, loans are granted up to 50% of the value of the land or up to 30 times the revenue. Loans are granted only after a thorough verification of security title-deeds as well as the necessity for the loan.

**Defects of Land Development Banks**

Land development banking made little progress in India. Many states are without a single Land Development Bank. The following have been noticed in the working of Land Development Banks,

(i) Loans given by them are predominantly for discharging of prior debts and not for purpose connected with land improvements.

Government possesses such staff, there is coordination between them and Land Development Banks.

(iii) These banks do not prescribe different periods for different types of loans.

(iv) They are not able to raise sufficient funds although their debentures are guaranteed by the State Governments.

(v) There is no co-ordination between the activities of State Co-operative Bank and the Land Development Bank.

(vi) Delay in Granting loans.

The Land Development Banks are now called (State Co-operative) Agriculture and Rural Development Banks (ARDBs) since they are providing long-term funds for various agriculture related projects besides development of land.

## National Bank for Agriculture and Rural Development (NABARD)

The Indian economy post independence was an agricultural economy. After independence, the focus was mainly on manufacturing and trade sector of the economy to boost development. However, a major part of the population in India live in the rural sector and so it is important to develop rural financial activities. This is why the government set up NABARD.

National Bank for Agriculture and Rural Development (NABARD)

As the name suggests NABARD is a development bank focussing primarily on the rural sector of the country. It is, in fact, India's apex development bank. It is one of the most important institutions in the country. NABARD is responsible for the development of the small industries, cottage industries, and any other such village or rural projects.

Established on 12th July 1982, it had an initial capital of 100 crores. The bank is under the supervision of a Board of Directors which the Government of India will appoint. The headquarters of NABARD is in Mumbai but it has many branches and regional divisions.

NABARD is instrumental in the development and efficiency of the current rural credit system. Over half the credit in the rural region comes from Co-operative banks and Regional Rural Banks. NABARD is responsible for regulating and supervising the functioning of such banks. Over the years NABARD has been pushing for development in the credit schemes for rural populations to meet their new credit requirements.

Other than meeting credit requirements of the rural sector NABARD is also instrumental in social innovations and projects. It partners with various organizations for many innovative projects such as SHG-Bank linking, innovative schemes for water and soil conservation. Over the last three decades, the institution has gained goodwill and trust in the farmers and rural communities.

## Regional Rural Banks – Functions and Importance

The banking sector in India is flourishing with a large and wide account holder base. Back in the late 20th century, banking was not equally distributed. It was more accessible to the urban population.

To bridge this gap between the economic development of urban and rural areas of India, Regional Rural Banks were established.

Regional Rural Banks are a type of commercial banks in India. These have the characteristics of both commercial banks and cooperative societies. Let's look at the functions, and regulation of Regional Rural Banks in India.

# What are Regional Rural Banks?

Regional Rural Banks are the Scheduled Commercial banks in India conducting banking activities for the rural regions at the state level.

There were established with an objective of providing easily accessible banking and credit services to the rural population and mobilising financial resources from the urban areas to rural districts of India. Hence, RRBs form a vital component of the financial service sector in India.

RRBs **operate at** the district level in the states, and they may cover multiple districts within that state.

Just like any other commercial banks, **the organisation of Regional Rural Bank** comprises of a Board of Directors, Chairperson, Managing Director, Manager, Regional Managers, and the assistant's staff.

# Ownership and Sponsorship

The ownership of shares of Regional Rural Banks in India is divided among the Central Government, State government, and the sponsoring banks:

- Central Government- 50%
- Sponsor banks- 35%
- State government- 15%

The sponsor bank helps the growth of an RRB by providing trainings to the staff of an RRB, providing management consultations to the bank for a minimum period of 5 years.

# A brief history of Regional Rural Banks in India

The **Narasimhan Committee on Rural Credit** under the rule of PM Indira Gandhi made certain recommendations for formation RRBs, which would be beneficial for the rural population as compared to commercial banks.

- An Ordinance for the establishment of Regional Rural Banks was passed on **September 26, 1975**, this being the date of establishment of RRBs.
- The Regional Rural Banks Act (RRB Act) was passed in 1976.
- Five RRBs were first established on the occasion of Gandhi Jayanti, on October 2nd, 1975. Later, many RRBs were established by the Government of India and respective state governments.

**The RRB Act 1976** states the functions of RRBs to provide financial assistance to farmers, Medium and Small Enterprises (MSMEs), local craftsmen and artisans, for agriculture, industries, trade, commerce, and their economic development. 25 RRBs were established within a year from the passing of this Act.

There are currently 43 Regional Rural Banks in India.

# Recapitalisation of RRBs

**What is Recapitalisation?** Due to defaulting and non- repayment of loans, banks often run into debts. To prevent this, the Government, as it is the largest shareholder in RRBs, invests capital in the banks.

The minimum prescribed **Capital to Risk-Weighted Assets Ratio (CRAR)**, also known as the Capital Adequacy Ratio, for any Scheduled Commercial Bank (which includes RBIs) is supposed to be **9%**. The banks unable to maintain this ratio have to be considered for recapitalisation.

- In 2009, a committee was formed under the chairmanship of K. C. Chakrabarty, to analyse the situation of RRBs. In 2010, it suggested many measures to increase the Capital to Risk-Weighted Assets Ratio (CRAR), one of them being recapitalisation of the banks.
- The Government was supposed to release Rs 1100 crore in 2010-11 and 2011-12 for this purpose, but the state government and the sponsor banks also have to release an amount proportionate to the shares held by them.
- The Government, in collaboration with NABARD, started a corpus building fund for the improvement of skills of the staff of RRBs with an initial corpus of Rs 100 crore.

In 2020, the Government announced the continuation of recapitalisation of RRBs. It has reserved Rs 1340 crore and will release of Rs 670 crore out of this fund for the same. It preconditioned that the proportionate amount is invested by the State government and sponsor banks. This move was to protect the farmers, local businessmen, trader, etc. affected economically by COVID- 19.

# The amalgamation of Regional Rural Banks

The merging of two or more banks together is known as amalgamation. In the 1990s, more than 190 RRBs existed. The amalgamation of these banks was done in a phase-wise manner.

In January 2013, 25 RRBs were merged into ten banks, reducing the number to 67 banks in the first phase. It was further reduced to 56 banks in March 2016 in the second phase. In the third phase, it was reduced to 43.

# Functions of Regional Rural Banks

Since a Regional Rural Bank is a Scheduled Commercial Bank, its primary functions are to accept deposits and to disburse loans. The important functions of Regional Rural Banks are discussed below.

**1. Accept Deposits**

- RRBs accept deposits from their members who hold an account in the bank.
- Deposits can be made in current or savings accounts.
- Depositors can also be made in fixed or recurring forms.

**2. Loan Extension**

- The RRB Act of 1975 states that the RRB can extend loans and credit services to the **Priority Sector (PS)**. The loans to this sector are

classified under **PSL or Priority Sector Lending**. The RBI announced the coverage of RBBs in PSL from FY 1997.

- The priority sector comprises of small and marginal farmers, craftsmen and artisans, local traders, medium and small scale businesses, education, housing, renewable energy, etc. which needs development and financial investment.
- 75% of the total Bank Credit has to be provided to the Priority Lending Sector. Out of this total credit, 10% has to be given to the economically weaker sections.
- Hence, short- term loans on a low rate of interest are extended by these banks to the priority sector. RRBs cannot, however, extend large or long- term loans to its customers.

**3. Wage disbursement**

- The Regional Rural Banks in India perform the important function of distribution of wages under the MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act), the Pradhan Mantri Gram Sadak Yojana (PMGSY).
- The pensions provided under the poverty alleviation schemes and pension schemes of India are also distributed through these banks.

**4. Secondary functions of RRBs**

- Similar to commercial banks, the secondary functions of the Regional Rural Banks in India are providing agency services and general utility services to their customers.
- Agency services like foreign exchange, bill payments, money wire transfer, etc. are performed by RRBs.
- Utility services like ATM, UPI, issuance of debit cards, locker facilities, etc. are also provided by RRBs in India.

# Regulation of the Regional Rural Banks in India

**1) Reserve Bank of India**: The RBI Act 1934 and the Banking Regulation Act 1949 are two principal regulating statutes for commercial banks in India.

**2) NABARD:** It stands for National Bank for Agricultural and Rural Development of India is the chief body for regulating rural banking sector in India.

- NABARD was established on **July 12, 1982**, by the RBI with an objective to improve the credit flow concentrated in the urban areas to the rural and semi-urban areas of India.
- Its major functions are monitoring, policy making, planning the activities and credit system of the rural banks.
- NABARD also helps rural banks in their development and supervises their activities on a timely basis.

# Importance of Regional Rural Banks

1. **Reduce rural and urban gap** by mobilising financial resources and services to rural regions.
2. Regional Rural Banks pave the way for **inclusion of the marginal population** like small farmers, Below Poverty Line (BPL) farmers and workers, small entrepreneurs, artisans, women, etc.
3. Regional Rural Banks assist rural businesses by providing them short-term loans, insurance facilities, etc., and help to improve the **role of entrepreneurship** in rural areas.
4. Providing assistance like loans, advances, insurance to agriculturists for farming inputs, equipment, processing, marketing activities, and cooperative societies helps in the **growth of agriculture** and **the advancement of farmers**.
5. Many public and private sector banks do not deal with farmers and rural section due to their small financial needs, fewer incomes, etc. In such a case, there is a need for a separate banking system to **protect the interests** of these sectors.
6. The RRBs look forward to **covering underserved rural areas** in terms of financial services and extending credit assistance.
7. Help in the **growth of cooperative societies**, agricultural societies, etc.
8. RRBs reduce farmers' and the weaker sections' **dependence on traditional sources** like moneylenders who exploited them with a high rate of interests on loans.

## RURAL INDEBTEDNESS IN INDIA

***What is Rural Indebtedness?***

Indebtedness means an obligation to pay money to another party. In rural India the poor farmers and wage labours etc. when are unable to repay a loan and accumulate it, gives rise to the problem of rural indebtedness. Rural indebtedness is an indicator of the weak financial infrastructure of our country, which includes inability of our economic system to reach to the needy farmers, landless people in the villages and the agricultural wage labourers.

The farmers borrow loan for either agricultural operations or some other uses like supporting the family in the lean season or to buy equipments. Due to lower income or wasteful expenditures when the farmers are unable to pay the loans they are unable to pay off their debts and thus accumulate the debt as well as pending interest on the amount. The weaker 'financial inclusion' in India has given the local money lenders an opportunity to exploit such farmers from generations to generations.

***Royal Commission on Agriculture, 1928***

The royal commission on Agriculture in India, 1928 was created in British India to exmine and report on the conditions of the farmers. It expressed:

*"The Indian peasant is born in debt, lives in debt and bequeaths the indebtedness to his successors. "*

***Causes of Rural Indebtedness***

The main causes of rural indebtedness in India are as follows:

1. Low income
2. Poverty and lack of education
3. Unproductive & wasteful expenditures of the loans
4. Inherited debts
5. Waste of money on Litigations
6. Poor financial inclusion
7. Weaker marketing system of banking facilities and services
8. Faulty money lending system in India
9. Uncertain Monsoon
10. Wasteful expenditures in social customs
11. High cost of agricultural production
12. Results of Rural Indebtedness:
13. Forced selling of mortgaged lands by the peasants due to nonpayment's consequently giving rise to landless laborers.
14. Exploitation by moneylenders.
15. Growing poverty due to lost capacity as a labourer.
16. Discrimination in the rural society
17. Social unrest causing crimes and suicides.
18. Dividing the rural society into landlords and landless people.
19. Posing hurdles in the social and economic developments.
20. Giving rise to problems of bonded labour.
21. Political exploitation as poor farmers not able to choose the right candidates due to monetary avarice.

22. Overall decay of the economy of India

***Some Remedial Measures to control the problem***

- Debt waiver by state governments. At time to time state governments and central government have announced debt waivers on peasants.
- **Farm Loan Waiver Scheme 2008:**Government of India in 2008 released Rs 10,000 crore to banks and financial institutions as part of compensation for writing off loans under the farm-debt waiver scheme throughout the country.
- Agricultural and rural Debt relief Scheme 1990-91 by central government.
- Development of network of institutional credit network in rural area comprising cooperative societies, Regional rural banks, Commercial banks etc.
- Control on Moneylenders.
- Comprehensive Crop Insurance Scheme 1985
- Kisan Credit cards Scheme 1998
- National Agricultural Insurance Scheme 2000
- Farm Income Insurance Scheme 2004
- National farmers Commission 2004
- Small farmers Development Agency
- Farmers Debt relief Commissions (State level)
- Micro Finance Schemes-SHG Bank Linkage Programs Etc.

Further, various Rural Employment Scheme like MGNREGA for economic upliftment of the rural poor and landless labourers focus on remedy to rural indebtedness.

India is an agrarian country with around 70% of its people depending directly or indirectly upon agriculture. But farmers' suicides in India is worrying.

As per the Central Government despite a multi-pronged approach to improving income and social security of farmers, over 12,000 suicides were reported in the agricultural sector every year since 2013. Farmer suicides account for approximately 10% of all suicides in India. (Reference: TOI)

There is no denying that the menace of farmer's suicides exists and runs counter to the aspirations of reaping benefits of our demographic dividend. In this article, we are analysing the farmers' suicides in India and its related data, the reasons and the way forward.

# Farmers’ Suicides in India – Reasons and Responses

**Farmers’ Suicides – What do the facts say?**

- The list includes farmers-cultivators and agricultural labourers.
- Seven states account for 87.5% of total suicides in the farming sector in the country. The states are Maharashtra, Karnataka, Telangana, Madhya Pradesh, Chhattisgarh, Andhra Pradesh and Tamil Nadu 606.
- Both marginal farmers and small farmers are committing suicide.
- Maharashtra is the worst affected state.
- Ironically, Punjab, which benefited most from the Green Revolution, also presents a depressing picture of farmer’s suicides in India. Between 1995-2015, 4687 farmers’ suicides have been reported from the state of Punjab of which 1334 from one Mansa district alone.

**What are the reasons behind farmers’ suicides in India?**

Scholars have given various reasons such as monsoon failure, climate change, high debt burdens, government policies, mental health, personal issues and family problems among the reasons of farmers’ suicides in India. Let’s analyse.

- **The surge in input costs:** A major cause of the farmers’ suicides in India has been the increasing burden on the farmers due to inflated prices of agricultural inputs. The culmination of these factors is seen in the **overall increase in the cost of cultivation**, for wheat, the cost at present is three times than it was in 2005.
  - **Cost of chemicals and seeds:** Be it the fertilisers, crop protection chemicals or even the seeds for cultivation, farming has become expensive for the already indebted farmers.
  - **Costs of Agricultural equipment:** The input costs, moreover, aren’t limited to the basic raw materials. Using agricultural equipment and machinery like tractors, submersible pumps etc adds to the already surging costs. Besides, these secondary inputs have themselves become less affordable for the small and marginal farmers.
  - **Labour costs:** Likewise, hiring **labourers and animals** is getting costlier too. While this may reflect an improvement in the socio-economic status of the labourers, driven primarily by MGNERGA and hike in minimum basic income, this has not gone too well with boosting the agriculture sector.
- **Distressed due to loans:**
  - NCRB data points out that in 2474 suicides out of the studied 3000 farmer suicides in 2015 the victims had unpaid loans from local banks. This is clear enough an indication for drawing correlations between the two. Whether or not the banks had been harassing them, however, is a long-drawn debate and needs more specific empirical evidence.

    - Moreover, a shift away from usual trend also revealed that of the loans taken by these farmers, only 9.8% were loans from money-lenders. Thus the pressure or muscle-power of money-lenders could be far from being a major driving force, as is otherwise perceived.
    - Another source of strong linkages between farmer suicides and indebtedness is reflected from the spread of the two. While Maharashtra had 1293 suicides for indebtedness, Karnataka had 946. Note that both these states saw one of the highest incidences of farmer suicides as well as indebtedness.
- **Lack of direct integration with the market:** Although initiatives like the National Agricultural Market and contract farming are helping integrate the farmers' produce directly with the market, cutting the role of intermediaries, the reality is still lagging behind.
- **Lack of awareness:** The digital divide, as well as the literacy gap, has made the marginal and small farmers particularly vulnerable due to their inability to utilise the positives of government policies. This is reflected in the continued unsustainable cropping practices – like cultivating sugarcane in water-deficit regions.
- **Water crisis:** The concentration of these suicides in the water-deficit regions of states like Maharashtra, Karnataka is a manifestation of how the water crisis and thereby failure to meet production demands have intensified the menace. This is particularly true in the backdrop of continued failed monsoons.
- **Interstate water disputes:** What has added to the already prevalent crisis is the unwillingness to cater to each other's water needs amongst the states. A case in point is the recently resurfaced Kaveri dispute that saw Karnataka and Tamil Nadu battle out water shortage both in and outside the tribunal even to the extent of non-compliance with the tribunal award.
- **Climate change** has acted as the last nail in the coffin by resulting in furthering of the uncertainties associated with the already uncertain monsoon system and hence agricultural production. While incidents like flash floods have led to crop losses, deferred monsoons have seen production shortfall year-in and year-out
- **India's urban consumer driven economic policies:** The political economy of India is driven more by the urban consumers than the rural producers. This is reflected in the *urgency to impose price controls* in case of price rise (imposing Minimum Export Prices, bringing items under Essential Commodities etc) and a *lacklustre withdrawal* once the price is under control. Contrast this with how we have been imposing minimum import price to secure our steel sector. This differential treatment to primary sector also limits profit margin and thereby hinders farmers' chances of breaking free from the cycle of indebtedness.
- **Loan waivers instead of restructuring, re-investment measures:** Our approach of handling farmer indebtedness and hence farmer suicides has been appeasement politics like the recent move by the UP government to waive off Rs 36000 crore worth of loans. Surprisingly this comes at a time when agricultural yield is expected to be better in the wake of a good monsoon.
- In essence, the factors sum up to crop failure, unsustainable production and subsequent farmer indebtedness leading to failure of strengthening the economic state of the farmer as the driving force behind these suicides.

**Is Suicide a matter of economics?**

The National Mental Health Association of the USA states that "No matter the race or age of the person; how rich or poor they are, it is true that most people who commit suicide have a mental or emotional disorder". **Suicide is not a matter of economics**.

**Responses to farmers' suicides**

Some of the major relief packages and debt waiver schemes announced by the government are summarised below:

- **2006 relief package** – primarily aimed at 31 districts in the four states of Andhra Pradesh, Maharashtra, Karnataka, and Kerala with a high relative incidence of farmers suicides.
- **Agricultural debt waiver and debt relief scheme, 2008 –** Agricultural Debt Waiver and Debt Relief Scheme in 2008 benefited over 36 million farmers at a cost of 65000 crore rupees (US$10 billion). This spending was aimed at writing of part of loan principal as well as the interest owed by the farmers.
- **2013 diversify income sources package** – In 2013, the Government of India launched a *Special Livestock Sector and Fisheries Package* for farmers suicide-prone regions of Andhra Pradesh, Maharashtra, Karnataka and Kerala. The package was aimed to diversify income sources of farmers.

Apart from these Central Government initiatives, there are many efforts from the state governments side like Maharashtra Bill to regulate farmer loan terms, 2008 and Kerala Farmers' Debt Relief Commission (Amendment) Bill, 2012.

**Way Ahead**

- **Policies of integrated pest management to prevent pest damage** – An all-inclusive approach that integrates biological, chemical, mechanical and physical methodology should be used to prevent crop damage. In this case, seeking inspiration from **Vietnam's no-spray early rule** (predatory beetles are sustained for a biological pest control, cutting pesticide requirement by 50%) can be a good way to start.
- **Lower fertilizer costs** – Helping fertiliser industries cut down on costs, through internal funding rather than external borrowing should lower the input costs.
- Leveraging advancements in Science and Technology by ensuring that state seed policies focus on new genotypes, contract farming and sensitization to adverse weather conditions.
- **Precision farming techniques** like **SRI** (Systematic Rice Intensification) must be encouraged.
- Farm equipment policy must focus on imported equipment to provide for cheaper local manufacture, some incentives like grant of duty credit scrips may be tried.
- Subsidies must be rerouted towards capital generation and entrepreneurial Custom Hiring Centers (CHCs) and the implementation must be ensured in a timely fashion.

- **Corporate Social Responsibility (CSR)** must be encouraged in the agricultural sector, particularly towards capacity-building, skill development and the establishment of CHCs.
- **Institutional financing** must also be ensured to be adequate and inclusive rather than catering to the elites within the farming community.
- **Cooperative farming** must be promoted amongst small and marginal farmers to ensure that they are not left lurking while the big farmers reap the benefit at their cost.
- **Doubling the farmer income** by 2022 is a healthy aim, but loan waivers can't be the answer. Instead, sustainable agriculture that thrives on re-investment & restructuring is the way ahead. The role that the state has been playing is one of emancipation, but what the primary sector and the farmer needs is empowerment.
- **Direct interventions:**
    - Early-warning signals for unsustainable loans to launch a 2-pronged approach catering to both the burdened farmers as well as stressed banks.
    - Options for restructuring loans must be used wherever possible.
    - Insurance claim settlements must be speedy and just.
    - District wise list of indebted farmers and efforts in de-stressing them through counselling and other alternative mechanisms should be tried.
    - NABARD and local administration must take control of the situation and play a greater role in curbing farmers' suicides.
- Innovative efforts like Crowdfunding can be employed through the involvement of Civil Society Organizations (CSOs).
- Efforts like Agro-Climatic zoning, education through DD Kisan, Soil Health Card Scheme, various crop insurance and facilitative schemes like PM Krishi Sinchayi Yojana will go a long way in helping out
- **Community-led** awareness must be taken employing a role model approach highlighting progress of farmers who have benefited from sustainable & climate-tailored agricultural practices