

DOUBLING FARMERS' INCOME BY 2022

<http://agricoop.nic.in/doubling-farmers>

The Doubling Farmers' Income (DFI) recognises agriculture as a value led enterprise empowering farmers with "improved market linkages" and enabling "self-sustainable models" as the basis for continued productivity-production and income growth for farmers. This builds the basic strategy direction for five primary concerns: optimal monetisation of farmers' produce, sustainability of production, improved resource use efficiency, re-strengthening of extension and knowledge based services and risk management.

■ BACKGROUND

Agriculture in India today is described by a net sown area of 141 million hectares, with field crops continuing to dominate, as exemplified by 55 per cent of the area under cereals. However, agriculture has been diversifying over the decades. Horticulture now accounts for 16 per cent of net sown area. The nation's livestock population counts at more than 512 million. However, economic indicators do not show equitable and egalitarian growth in income of the farmers. The DFI approach includes farmers' income into the core of its deliberations and incorporates it as the fulcrum of its strategy.

■ RESPONSIBLE BODY

Department of Agriculture, Cooperation and Farmers Welfare, Govt of India.

■ EFFORTS IN DETAIL

The major sources of growth operating within the traditional agriculture sector include

- (i) Improvement in crop productivity
- (ii) Improvement in livestock productivity
- (iii) Resource use efficiency or savings in cost of production
- (iv) Increase in cropping intensity
- (v) Diversification towards high value crops.

Further, the following two sources of growth operate outside the traditional agriculture sector, but contribute to farmers' incomes:

- (vi) Improvement in real prices received by farmers
- (vii) Shift from farm to non-farm occupations.

The Committee on Doubling Farmers' Income (DFI) draws its members from various Ministries/Departments of Government of India, as well as civil society with interest in agriculture and concern for the farmers. The DFI Committee has co-opted more than 100 resource persons from across the country to help it in devising the strategies.

The Committee has since its constitution in 2016, held meetings, stakeholder consultations, several conferences & workshops across the country and benefitted from many such deliberations. Three institutes, namely, National Institute for Agriculture Economics and Policy Research (NIAP), National Council for Applied Economic Research (NCAER) and National Center for Cold Chain Development (NCCD) have been identified as the Knowledge Partners.

■ OUTCOMES

It is important to note that strong policy measures would be needed to ensure capitalisation of all possible sources of farmers' income within as well as outside the agricultural sector. Prof. Ramesh Chand, Member, NITI Aayog has estimated the scope and contribution of these seven factors of growth at the all-India level, and has concluded that the combined effect of the seven potential sources of growth implies about 75.1 per cent growth in farmers' farm-income (crops and livestock) in seven years, if the factors underlying the growth in farmers' income rise at the same rate as experienced during the decade ending 2014.

It is important to redefine agriculture from production centric to farmer centric, with the country registering record production in all commodities barring oilseeds. The mantra is higher productivity and resource use efficiency, efficient markets and land pooling for economies of scale and higher returns. More value to farmers would be possible though improved market intelligence and linkages to reduce wasteful output and losses. Farmers are being encouraged to use warehouses and avoid distress sales. Loans against negotiable e-warehouse receipts are being provided with interest subvention benefits. To protect farmers from losses, the government is focusing on storage facilities and integrated cold chains in rural areas. Pradhan Mantri Kisan Sampada Yojana has been started for development of food-processing capabilities by working on the forward and backward linkage of agro processing cluster, which will benefit 0.2 million farmers and create employment opportunities for about 0.5 million. Higher productivity at lower costs would also mitigate inflationary pressure. Marketing is the critical priority – realisation of optimal prices being the real challenge and not production any more. Hence comprehensive post production interventions have been put in place through progressive reforms in agri-marketing laws; a robust agri-logistics systems so as to minimise losses and maximum market range and value capture.

Secondary agriculture is given an important role in the national work on DFI. This would utilise primary products and by-products of agriculture and other biological resources available locally and generate jobs through appropriate rural industrialisation. Activities like bee keeping mushroom cultivation, lac cultivation, agroforestry including bamboo, mariculture, etc together with primary processing at village level will allow vertical extension of land use for supplementing farm income.

The adoption of new technologies in agriculture such as space technology is helping in better planning through forecasting of crop production, agricultural land-use mapping, drought prediction, and utilisation of fallow paddy fields for pulses and other crops. Pradhan Mantri Fasal Bima Yojana (PMFBY) provides financial support to farmers suffering crop loss/damage arising out of unforeseen events, ensuring flow of credit to the agri sector which would contribute to food security, crop diversification and enhancing growth and competitiveness of agriculture sector beside protecting farmers from agriculture risks.

■ WAY FORWARD

DFI report concludes that the key to sustainability would be to transform from intensive farming to intelligent farming by way of crop alignment based on market forces and infusion of other tools including Integrated Pest Management, Integrated Nutrient Management, enhanced water productivity for climate resilient agriculture.

DFI recommendations are both specific and generic, and will be germane to policy makers, implementing agencies, farmers and farmers bodies, farmer centric opinion makers, NGOs, public and private sector entrepreneurs and investors, subject matter experts and students, as also international bodies interested in Indian agriculture. They would be able to engage themselves in review, interpretation, extraction and drawal of recommendations which may be much more meaningful and comprehensive than what has been done by the Committee.

“The mandate of Agriculture is to generate both food and raw material, to meet the requirement of modern society for feed, fibre, fuel and other industrial uses, and in a manner that is sustainable and with aim to bring economic growth to farmers”

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NATIONAL AGRICULTURE MARKET (E-NAM) www.enam.gov.in

- Promotes remunerative prices to farmers through better price realization, increased competition and transparency in markets.
- Contributes to policy transformation from production centric to income centric to work towards India's target of Doubling Farmers' Income by 2022.
- 585 principal markets on-boarded; 14.6 million farmers registered; 200,000 traders and service providers registered.
- Transaction of 23.3 million MT worth \$8.5 billion since launch in 2016.
- Implemented by DAC & FW in conjunction with states.

■ BACKGROUND

- With record production of agri commodities by the Indian farmers, the policy in India has seen a transformation from a production centric to income centric, with making markets robust and transparent a key factor. The National Agriculture Market (e-NAM) - a scheme devised to improve overall market efficiency and transparency in agriculture trade, is an online network that integrates agriculture produce markets across the country with the larger objective of 'improved prices through increased negotiation'

- Implemented by Department of Agriculture Cooperation and Farmers Welfare, Govt of India National Agriculture Market has been envisaged as a national digital platform, for farmers and traders, for selling their commodities to buyers across the country with the vision of “One Nation, One Market”, benefitting the 120 million farmers of India through better competition, better price realisation and enhanced transparency in trade. Launched on 14 April 2016 by Prime Minister Modi, the whole program was executed in 3 Phases viz. Phase 1: 250 Markets were onboarded across 10 States; end of Phase 2: 417 Markets and at the end of Phase 3: 585 Markets spread across 16 States and 2 Unions. Territories were integrated. It is a work in progress.

It is evident that reception of the stakeholders to the scheme is overwhelming. Currently, 14.6 Million farmers of the country have on-boarded the national trading platform.

Other registered stakeholders that are utilizing the benefits of the program are traders and service providers, with nearly 200,000 having registered in just 30 months. With the aim of benefitting small farmers, e-NAM enables registration of Farmer Producer Organizations. Over 600 such organizations are registered so far. Trade has risen progressively on the online platform; it increased from 0.55 Lakhs Metric Tons in the first year to 1.60 Lakhs Metric Tons by the end of second year and currently at 23.3 Million Metric Tons worth \$8.5 Billion presently being traded for 124 agriculture commodities.

'Trade between geographies' viz. inter State and inter market trade is a critical factor that determines the efficiency of the scheme and therefore one of the important objectives of e-NAM has been to remove barriers of movement of agriculture produce through facilitating liberal licensing. Inter State trade on e-NAM increases competition for farmers' produce by giving them a wider choice of selling points, and in doing so increases income through appropriate value realization.

Interstate trade has commenced recently on e-NAM platform and is currently active between the States - Uttar Pradesh and Uttarakhand; Rajasthan and Gujarat; and Telangana and Andhra Pradesh. Trade between mandis within the States is 0.217 million MT. Information on logistic providers is being provided in the e-NAM portal to traders from outside the State to facilitate transportation of commodities and an Inter State dashboard is being developed exclusively to promote trade among e-NAM states.



■ KEY FEATURES OF E-NAM

User friendly interface:

- Complete trading through Mobile app
- Tab and POS based gate entry operations
- Integrated payment and banking operation
- Integration with weighing scale and assaying laboratory
- Multilingual support on portal and mobile app
- Enhanced business intelligence dashboard
- Enhanced mobile app features

MIS and Analysis:

- Equips key stakeholders with MIS platform which provides commodity wise analysis of trade performance.

Grievance Redressal Management System:

- GRMS provides registration and tracking of stakeholder grievances.

Change Management:

- Capacity building workshops for farmers, traders, market officials, service providers have been undertaken by the Strategic Partner. A total 700+ capacity building trainings have been undertaken.

Online Payment:

- e-NAM portal and mobile application provides multiple payment avenues to buyer to make online payments to settlement account of e-NAM portal for onward transfer to farmers and other stakeholders. Till date, online payments of more than \$35 million have been done on e-NAM.

Real time updates:

- The e-NAM website and mobile provides real time information on prices and arrival volume in nearby e-NAM markets, giving farmers the choice of selecting the market for selling their products.

Quality Assaying:

- Assaying Labs of each market under e-NAM are equipped with advanced lab facilities such as Digital Assaying solution for all physical parameters, Moisture Analysis, Oil Content testing machine. Pilots have been launched with Artificial Intelligence and Machine Learning based systems.

CLIMATE RESILIENT AGRICULTURE

- National Mission for Sustainable Agriculture – one of 10 Missions under Prime Minister's Council for Climate Change
- Vulnerability Atlas of India at district-level for all the 572 rural districts
- Flagship network project 'National Innovations in Climate Resilient Agriculture (NICRA)' launched in 2011
- Climate resilient varieties developed
- Implemented by Ministry of Agriculture and Farmers Welfare

■ OBJECTIVE

"To transform agriculture into an ecologically sustainable climate resilient production system by devising appropriate adaptation strategies for ensuring food security, equitable access to food resources, enhancing livelihood opportunities and contributing to economic stability at the national level" .

India recognizes that for ensuring the country's food security both in the short- and long-terms, and making agriculture sustainable and climate-resilient, it will need to develop appropriate adaptation and mitigation strategies. These efforts have provided valuable inputs in terms of regional and national level impacts of climate variability and climate change on crops, horticulture, livestock and fishery. Through its programmes and schemes, focus on climate resilient agriculture, appropriate adaptation strategies have been devised for ensuring food security, enhanced livelihood opportunities and economic stability.

NICRA:

Efforts are being made to develop varieties and cultivars tolerant to abiotic stresses and higher resource use efficiency and management practices for various crops under strategic research component of NICRA. [Climate resilient crop varieties for sustainable food production under aberrant weather conditions are listed as below: NICRA/2015/Bulletin No 4]. The first ever Vulnerability Atlas of India has been prepared at district-level for all the 572 rural districts. This Atlas is being revised with updated details considering the IPCC, AR-5 and census data. District Agriculture Contingency Plans have been prepared for 648 districts in India and updated regularly. Interface meetings with State Governments are conducted every year before the main cropping seasons of India – kharif, rabi and zaid for preparedness.

State of the art, climate change research facilities have been established at several institutes across the country to carry out research on the impact of climate change and develop climate resilient technologies.

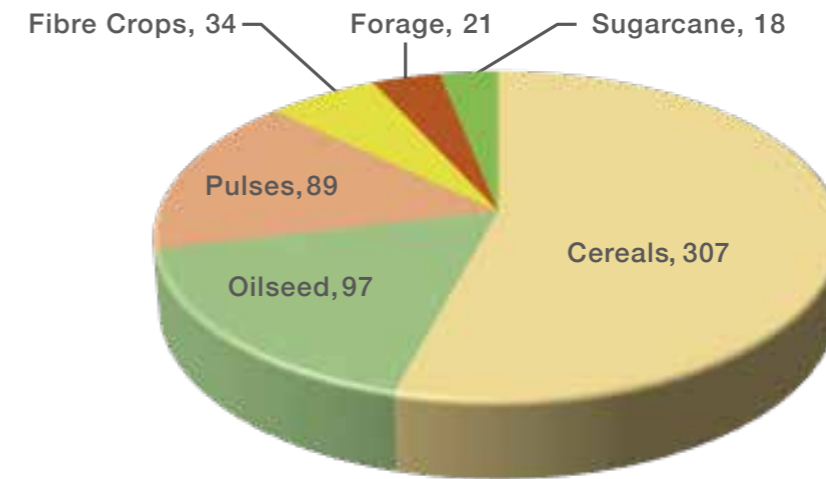
GHG inventory for agriculture sector in the country is being prepared by standardization of the techniques for different cropping, and marine ecosystems and estimates of carbon sequestration potential through major agroforestry systems in the country. The climate resilient interventions through Technology Demonstration Component (TDC) are being implemented by developing a village in each of 151 vulnerable districts into a climate resilient village (CRV). Institutional interventions including establishment of Village Climate Risk Management Committees (VCRMCs), Custom Hiring Centres (CHCs) for farm implements, seed banks for access to improved crop cultivars, and fodder banks are promoted through collective action to build resilience among communities. A large scale capacity building program on climate resilient agriculture is being undertaken with more than 1,200 scientists, 450 research scholars and hundreds of post graduate students of agriculture universities involved in climate change research and dissemination of climate resilient technology across the country.

The NMSA Strategy Document has been revised for the period 2018-2030 and updated to align with the national and international commitments and priorities of India. The program interventions under NMSA include Soil Health Cards, Traditional Agriculture Systems (organic farming and value chain development), Agroforestry and bamboo value chain. Development of rainfed areas is a priority keeping in view that about 50% of the cropped land is irrigated and is driven by the National Rainfed Area Authority. In addition the program on increasing the coverage of micro-irrigation is ensuring enhanced water efficiency, lower consumption of energy and enhanced crop productivity.

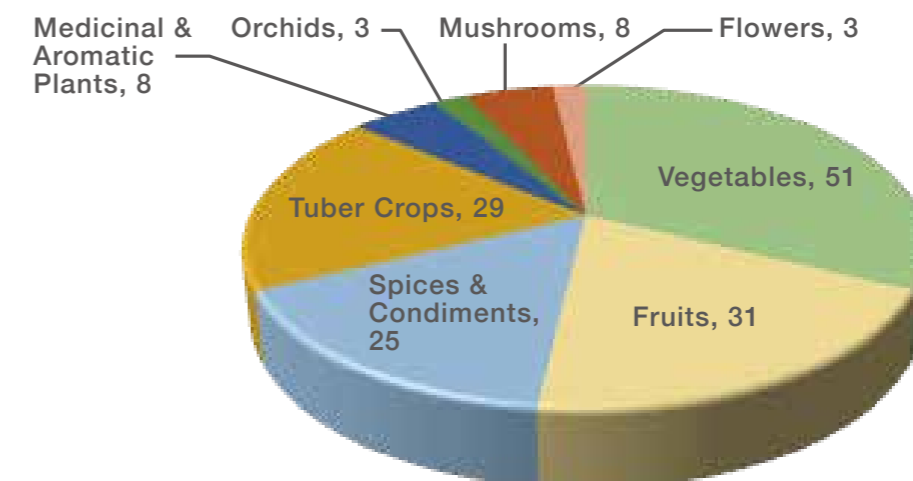
The 11 key dimensions monitored closely are

- (i) Area under organic farming
- (ii) Production of Bio-fertilizers
- (iii) Precision Irrigation
- (iv) SRI/Direct Seeded Rice from Transplantation
- (v) Crop diversification
- (vi) Additional Area under plantation in Arable land
- (vii) Climate Resilient Varieties (CRV) Identified/Released
- (viii) Identification of genotypes of crops with enhanced CO₂ fixation potential and less water & Nutrients consumption
- (ix) Climate Resilient genotypes with greater adaptation to drought, flood, salinity and high temperature
- (x) Coverage of milch animals under ration balancing program (lakh No.) and
- (xi) Establishment of bypass protein feed making unit

CLIMATE RESILIENT VARIETIES FOR FLOOD, DROUGHT, SALINITY, HEAT, FROST IN LAST 5 YEARS



566 varieties of field crops



185 horticultural crop varieties

SELF SUFFICIENCY IN FOODGRAINS

- India's sustainable food grain production
- Production in 2017-18: Food grain 285 million tonnes, Horticulture 311 million tonnes
- Pulses: Area 30 million ha, 25 million tonnes (28% of global production)
- Sustainable use of natural resources and farmer welfare

INDIAN AGRICULTURE

- 15 diverse agro-climatic zones, diverse flora and fauna
- More than 50% of the population is engaged in agriculture
- Transition from importer of food grain to an exporter in last three decades
- Succeeded in Green Revolution and moving towards 'Rainbow Revolution'
- Sustainable food grain production through improved varieties, technology and focused program interventions

INITIATIVES AND EFFORTS

- Department of Agriculture Cooperation and Farmers Welfare in coordination with State Departments of Agriculture, National/Regional Institutes, State Agriculture Universities and International Research Institutes is implementing various schemes/projects for development of agriculture and allied sectors in the country.
- Focus on enhancing production and productivity through sustainable use of natural resources and enhancing the farm level economy.
- Multi level monitoring of the targets set by the Government for effective implementation of the schemes.

INDIA'S SELF SUFFICIENCY IN FOODGRAIN PRODUCTION

PROGRAMS OF GOVERNMENT IN AGRICULTURE

- National Food Security Mission (NFSM) for increasing overall foodgrain production through introduction of latest crop production technologies.
- National Agriculture Development Program (RKVY)- infrastructure development in rural India.
- Bringing Green Revolution in Eastern India (BGREI) – especially for rice based cropping system.
- Targeting Rice Fallow Areas (TRFA) for pulses & oilseeds production.
- Mission for Integrated Horticultural Development (MIDH), including protected cultivation and precision farming.
- Prime Minister's Irrigation Program (PMKSY)- increasing water productivity with micro irrigation.
- Traditional Farming Program (PKVY and MOVCD)- promotion of organic farming and value chain development.

- Soil Health Card (SHC) to 120 million farming households biennially.
- Prime Minister's Agriculture Insurance Program (PMFBY).

R&D IN AGRICULTURE

- Use of biotechnological tools
- Climate resilient varieties developed in last 5 years – 566 in field and 185 in horticulture crops
- Enhancement of varietal replacement rates
- Strengthening of seed chains, seed quality assurance and seed banks
- Bio-fortified varieties for nutrition security – high iron, protein, zinc, calcium
- Adoption of Indian potato varieties in Afghanistan, Bangladesh, Nepal, Philippines, Madagascar, Mexico, Bolivia

ACHIEVEMENT IN AGRICULTURE

- India is #1 in production of total pulses, jute & jute like fibres and total milk in the world and #2 in wheat, paddy, vegetables & fruits, sugarcane, tea and coffee.
- New initiatives like Breeder Seed production; Creation of Seed Hubs; Distribution of Mini kits of pulses; Strengthening/creation of Centers of Excellence; promoting intercropping of pulses in sugarcane; Targeting Rice Fallow Area etc. has resulted in record production of pulses.
- India is exporting food grains like rice, wheat, pulses and other cereals, during 2017-18, the export of agriculture & allied commodities have increased by 22.88% over 2016-17.

WAY FORWARD

- Focus on increasing availability and accessibility.
- Crop diversification, sustainable production practices like conservation agriculture, water management and integrated nutrient and pest management.
- Fortification of foods for addressing micronutrient deficiencies through processing, plant breeding and improved soil fertility.
- Emphasis on low productivity and high potential areas including cultivation of food grain crops in rain fed areas.
- Agro-climatic zone wise planning and cluster approach for crop productivity enhancement.
- Capacity building of the farmers & extension functionaries.

India's proposal for International Year of Millets endorsed by FAO Council for 2023.

ADDRESSING GENDER ISSUES

- Agriculture sector employs 80% of all economically active women, comprising 33% of the agricultural labour force and 48% of self-employed farmers
- Women as active agents in rural transformation

Agriculture, the single largest production endeavour in India and contributing to 16% of the GDP, is increasingly becoming a female activity. About 18% of the farm families in India are headed by women. Beyond the conventional market-oriented narrower definition of 'productive workers', almost all women in rural India can be considered as 'farmers' in some sense, working as agricultural labourers, unpaid workers in the family farm enterprises or combination of the two. Several micro-level studies point to the fact that women's participation in agriculture in India is anywhere between 60.75 % in most of the farm related activities to 100% in several.

Responsible Body National Gender Resource Centre in Agriculture of Ministry of Agriculture and Farmers Welfare (krishivistar.gov.in/ngrca.aspx)

MAJOR INITIATIVES

- Earmarking 30 per cent of funds for women under various major programmes and development interventions
- Focussing on formation of women Self Help Groups (SHGs), Women Federations and Farm Women Producer Organisations/Companies: these farm women's food security groups are to serve as 'model food security hubs'
- Introducing 'pro-women' initiatives
- Provision of additional assistance for women in various programs
- Women oriented research – Directorate of Research for Women in Agriculture – ICAR; All India Coordinated Research Projects on Home Science

OUTCOMES

Over 15 million farm women (24.25% of the total benefited farmers) have participated in farmer oriented activities like exposure visits, training, demonstrations & Farmer Fairs in last 10 years. Over 4.64 million women have been trained in the last 2 years through Agriculture Technology Management Agency (ATMA) and other programs and 811 skill courses organised exclusively for women. Besides, number of macro and micro level studies show increasing participation of women in agriculture and associated activities

THE WAY FORWARD

Realizing that it is 'Gender' that differentiates the roles, responsibilities, resources, constraints and opportunities of women and men in agriculture, precise gender information is the need of the hour. Incorporating gender into agricultural development will lead to:

- Building inherent strength of women and men to mutually learn;
- Overcoming gender based prejudices; and
- Articulating gender perspectives in development activities

In line with the provisions under National Policy for Farmers-2007, the strategy of the Government of India is to focus on farmers' welfare by making farming viable both for men and women. This would improve farm women's access to productive resources including agricultural extension services thereby bringing overall improvement in the lives of rural women. This would not only enhance the production and productivity of agricultural sector and improve overall national food security but would also smoothen the transition of women from being beneficiaries of the various programmes to active participation enabling empowerment.



Ultra-poortribal women covered under Program for Empowerment of Women Farmers (MKSP) - Odisha



Promotion of Mulching as standard practice-Rice bed preparation-Madhya Pradesh (MP)



Training of women farmers on seed selection/sorting by Community Resource Persons (CRPS) - Maharashtra



Training of Self Help Groups (SHGs) members on Azolla preparation by CRP-Rajasthan

SOIL HEALTH CARDS (SHC) (www.soilhealth.dac.gov.in)

■ OUTLINE

- Provides information to farmers on nutrient status of their soil based on 12 parameters
- This is followed by recommendation on appropriate dosage of nutrients to be applied for crop production and improving soil health and its fertility.
- Soil health card is provided to farmers across the country at an interval of 2 years.
- 107.38 million soil health cards were issued to farmers in cycle-1 (2015-2017) and 84.54 million soil health cards have been issued so far to farmers in cycle-2 (2017-2019)

■ BACKGROUND

- Earlier financial assistance was provided to State Governments for establishment and strengthening of soil testing laboratories. Preparation of soil health cards and inputs prescription has been taken up for the first time across the country.
- The SHC scheme was launched by Prime Minister Modi on 19th February, 2015 at Suratgarh (Rajasthan), to provide soil health cards to all farmers in the country at an interval of 2 years so as to enable application of appropriate recommended dosages of nutrients for crop production and improving soil health and fertility.
- Soil Health Card Portal has been developed for registration of soil samples, recording test results of soil samples and generation of Soil Health Card (SHC) along with fertilizer recommendations. This is a single, generic, uniform, web based software accessed at the URL www.soilhealth.dac.gov.in.
- The portal promotes uniform adoption of codes e.g. Census Codes for locations.
- The system has samples tracking feature and provides alerts to farmers about sample registration and generation of Soil Health Card through SMS and E-mail.

■ UNIQUE FEATURES OF SHC SCHEME

- Universal coverage

Universal coverage of all the farm holdings in the country. Issue of Soil Health Cards every two years.

- Soil sampling method

For the first time a unified soil sampling criteria has been adopted. Samples are collected at a grid of 2.5ha in irrigated area and 10ha in un-irrigated area. GPS based soil sampling has been made mandatory to allow monitoring of changes in the soil health over periodic cycles.

- Soil analysis criteria

Uniform soil testing methodology has been adopted. 12 Soil Health parameters viz. primary nutrients (NPK); secondary nutrient (S); micronutrients (B, Zn, Mn, Fe, & Cu); and others (pH, EC & OC) are being analysed for comprehensiveness. Analysis of secondary nutrients and micronutrients is now mandatory.

- Soil Health Card

Uniform format of Soil Health Card has been adopted. Scientifically sound fertilizer recommendation approach is being adopted for soil test based crop-wise fertilizer recommendation in the soil health card.

- Samples tracking

The system has samples tracking feature and provides alerts to farmers about sample registration and generation of Soil Health Card through SMS and E-mail.

- National Productivity Council (NPC) in their study submitted in February, 2017, conducted in 76 districts in 19 States covering 170 soil testing labs and 1,700 farmers found that as a result of application of fertilizer and micro-nutrients as per the recommendations on the soil health cards there has been a decrease of use of chemical fertilizer application in the range of 8-10% and there was an overall increase in the yield of crops to the tune of 5-6%.
- For providing soil health card to farmers in time, strengthening soil testing infrastructure has been taken up namely establishment of 411 static labs, 100 mobile labs, 8,752 mini labs & 1,562 village level labs and strengthening of 648 existing labs. An additional soil testing capacity of 48.5 million soil samples per annum will be created.

■ WAY FORWARD

- Development of district nutrient maps; linking SHC with Fertilizer DBT throughout the country; awareness generation; and soil maps, fertilizer use based crop planning.



BLUE REVOLUTION

■ OUTLINE OF THE CASE

- Fisheries sector contributes about 1.0% to National GDP and 5.23% to agricultural GDP
 - **Fish production** : 12.61 MMT in 2017-18 (71% Inland and 29% marine)
 - **Exports**: USD 7.08 Billion; 1.38 million tonnes in 2017-18
- Implemented by Department of Fisheries, Ministry of Agriculture and Farmers Welfare

■ MAJOR ACTIVITIES INCLUDE

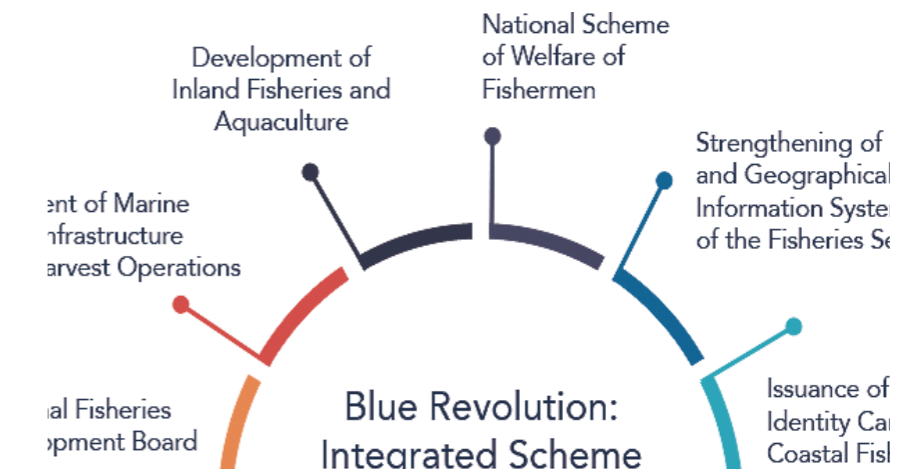
- Intensive Aquaculture with diversified species
- Cage and Pen culture in reservoirs
- Coastal Aquaculture
- Mariculture
- Deep sea fishing
- Sea weed culture
- Trout culture
- Ornamental fish culture

■ MAJOR ACHIEVEMENTS

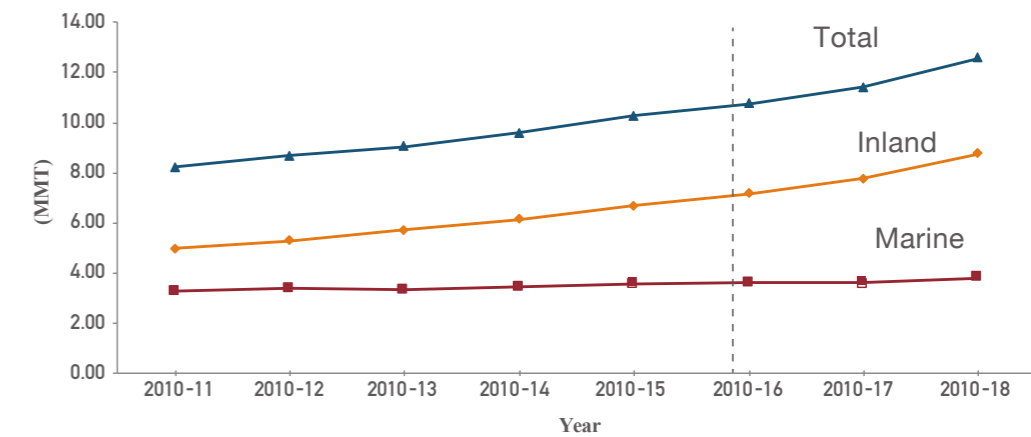
- About 30,000 ha additional area brought under aquaculture.
- 8,000 cages installed in reservoirs
- 1,300 Re-circulatory Aquaculture Systems (RAS) established
- Promoted production of SPF shrimp seed
- Resource specific deep sea fishing vessels are fabricated indigenously
- Developed system for reporting aquatic animal diseases
- Established fisheries infrastructure facilities for hygienic handling and value addition
- Initiated mariculture and open sea cage culture

BLUE REVOLUTION

Major objective: Enhancement of fish production and productivity in sustainable manner



FISH PRODUCTION



- ▶ Average annual growth rate during the years (2012-13 to 2014-15): 5.79%
- ▶ Average annual growth rate during the years (2015-16 to 2017-18): 7.15%

