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\* REVISED FROM APRIL 2016  
ISSUE ONWARDS



The Monthly Journal  
**Kurukshetra**

MINISTRY OF RURAL DEVELOPMENT

Vol. 66 No. 8 Pages 52

June 2018

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Kurukshetra seeks to carry the message of Rural Development to all people. It serves as a forum for free, frank and serious discussion on the problems of Rural Development with special focus on Rural Uplift.

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# Editorial

In today's world, Gandhiji's words that India's survival depends on the well-being of its villages seem even more pertinent. About seventy percent of India's population live in the countryside. This makes rural India a focal point for issues of national concern. Accordingly, the Government is keeping the growth and development of rural India at the centre stage of its policies. This was apparent in the budget 2018-19 in which several measures to boost agricultural production and the rural economy have been announced.

"Pradhan Mantri Awaas Yojana-Gramin" (PMAY-G) was launched by the government as a flagship rural housing scheme. It aims to provide "House for All" in the rural areas to 1 crore rural households, within a period of three years-2016 – 2019. Against the target of 51 lakh houses in 2017-18, a total of 34.99 lakh houses have already been completed. The Government is making all out efforts to achieve the target of one crore PMAY (G) houses by 2019.

Pradhan Mantri Gram Sadak Yojana"(PMGSY) aims to provide all weather road connectivity to unconnected habitations as part of a poverty reduction strategy. Based on the data on completed rural roads under PMGSY, it is found that the progress is noteworthy and 82% eligible habitations are well connected. It is likely that we will be very close to 100% connectivity of eligible habitations by March, 2019.

NITI Aayog in its policy paper on Doubling Farmers' income set an ambitious goal to double farm incomes in real terms by 2022, moving away from the historical focus on increasing production. The government-appointed Committee on Doubling Farmers' Income led by Ashok Dalwai, has in its report assumed that the sector's growth rate from 2015-16 will remain constant till 2022 and increase the farmers' income by 9.23 per cent every year.

The Pradhan Mantri Kaushal Vikas Yojana, the flagship scheme on skilling was launched in 2015 to provide industry relevant skill training to the youth to enable them secure a better livelihood. The scheme provides short-term training to the job seekers as well as Recognition of Prior Learning (RPL) to the existing workforce through accredited and affiliated training partner/training centers and ensures placement.

The Government has decided to look at school education from a holistic perspective rather than a segmented vision at various levels of primary, upper primary, secondary and senior secondary levels. The Centrally Sponsored Scheme of 'Samagra Shiksha Abhiyan' has been initiated from 2018-19 with the objective of provision of inclusive and equitable quality education from pre-school to senior secondary stage. It envisages that each and every child progresses smoothly and continuously through various levels of schooling without any barrier.

The National Health Protection Scheme (NHPS) is one of the boldest initiatives of the government. It will provide medical insurance cover of Rs 5 lakh to 500 million low-income Indians. The scheme is budgeted to cost around Rs 10,000 crore annually. Expected to roll out on October 2, 2018, it is a long overdue step towards providing universal medical care.

Swachh Bharat Mission-Gramin was launched on 2nd October, 2014 on the occasion of Gandhi Jayanti to achieve "Clean India" by 2019. During the period of 2014-19, the government has proposed to spend Rs.1.34 lakh crore for this mission in the rural area. As a result, 6, 95, 03,071 household toilets got constructed since 2014 and 82.38 % people have their toilets facility in their premises.

For new rural India to benefit from emerging technologies, robust telecom connectivity is the key. This is already an area that the Government is keenly focused upon. Through its Bharat Net project, the Department of telecommunications is connecting 2.5 lakh village panchayats with Optic Fibre Cable to enable delivery of high speed broadband. Last mile access is envisaged to be provided through wireless connectivity including subsidized Wi-Fi networks.

Rural electrification has been a major policy success. The government has implemented one of its flagship schemes called "Pradhan Mantri SahajBijliHarGhar Yojana (Saubhagya). The objective of Saubhagya Scheme is to provide energy access to all by last mile connectivity and electricity connections to all remaining un-electrified households in rural as well as urban areas to achieve universal household . It is targeted to achieve universal household electrification in the country by March 2019.

The Government's rural focus bodes well for the overall growth of the country's economy. In PM Modi's words, "For the development of the nation, the prosperity of farmers is essential. ....without an empowered farmer, the dream of 'New India' will remain unfulfilled."

# NEW PRIORITIES FOR AGRICULTURE

Dr KN Tiwari

Accelerating growth in agriculture is the most desirable option for sustaining a high rate of growth of 8 – 10% in GDP, as is being aimed at. In the context of the current production levels, doubling food production in the next five years will be a great challenge and test of our capacity to successfully employ all possible growth-inducing measures. Doubling the country's food production as well as farmers' income is an imperative that we cannot ignore.

**A**ccelerating growth in agriculture is the most desirable option for sustaining a high rate of growth of 8 – 10% in GDP, as is being aimed at. In the context of the current production levels, doubling food production in the next five years will be a great challenge and test of our capacity to successfully employ all possible growth-inducing measures. Doubling the country's food production as well as farmers' income is an imperative that we cannot ignore.

Agriculture plays a vital role in India's economy. Nearly 55 per cent of the population is engaged in agriculture and allied activities contributing 17.4 per cent to the country's Gross Value added. Therefore, the growth of agriculture and allied sectors is a critical factor in improving the performance of Indian economy. The growth of the agriculture and allied sectors decreased from 7.0 per cent in 2010-11 to 2.8 per cent in 2011-12, and to 2.1 per cent in the first half of the current financial year. This deceleration is perhaps reflective of the challenging economic scenario, but this situation can be reversed quickly through

improved farm technologies. We have envisaged the agriculture sector to grow at 4 per cent and above per annum. As demand for major crops are projected to slow down, we will have to rely primarily on productivity gains to attain the targeted growth. Agriculture ought to be an effective agent of change in rural economy in India.

The Government initiatives towards enhancing crop productivity and doubling farm income through various schemes are briefly described below:

- 1. Soil Health Card Scheme :** To address the issue of poor soil health, "Soil Health Card" (SHC) scheme was launched with an outlay of Rs. 568.54 crore to provide information on soil fertility status to each one of the 140 million farmers of the country once in a cycle of 3 years on a continuous basis. This will facilitate building-up soil database of the country and monitor the changes occurring in the soil health over time for 12 parameters. Based on such comprehensive soil diagnostics, the SHC will recommend manure, fertilizers and



amendments for at least six crops,(3 *kharif* crops and 3 *rabi* crops).

- 2. Promotion of Organic manure :** Ten lakh compost pits for production of organic manure will be taken up by making productive use of the allocations under MGNREGA.

**Promotion of City Compost:** The government initiated a scheme to produce city compost and made it mandatory to ensure its sale through fertilizer industry along with fertilizers to improve soil health. In the first phase, fertilizer companies will co-market city compost for increasing the efficacy of chemical fertilizers. This scheme has been connected with “*Swachh Bharat Abhiyan*”. The fertilizer industry will get incentive @ Rs. 1500/ per ton for the sale of city compost.

**Incentives to Fertilizer Industry for Soil and Seed Testing:** Two thousand model retail outlets of fertilizer companies will be provided with soil and seed testing facilities during the next three years.

**Rationalizing NPK Pricing to Minimize Subsidy Burden:** Government is making available fertilizers (Urea and 21 grades of P&K fertilizers)to farmers at subsidized prices through fertilizer manufacturers and importers. Fertilizer subsidy and rationalizing the NPK pricing for optimizing NPK ratio and better application technologies to improve efficiency and reduce fertilizer subsidy by Rs.25,000–30,000 crores annually is essentially important.

- 3. Enhancement of Pulses Production:** Incentives are being given for enhancement of pulses production. Rs. 500 crores under National Food Security Mission has been assigned to pulses. The number of districts covered has been increased to 622.

- 4. Paramparagat Krishi Vikas Yojana:** **Paramparagat Krishi Vikas Yojana**” is an elaborated component of Soil Health Management (SHM) of major project National Mission of Sustainable Agriculture (NMSA). Under PKVY, Organic farming is promoted through adoption of organic village by cluster approach and PGS certification. The Scheme envisages promotion of commercial organic production through certified organic farming. The produce will be pesticide residue free, contribute to improve the health of consumer, raise farmer’s income, create potential market for traders and finally motivate the farmers

for natural resource mobilization for input production.

- 5. Farmers Inter-State Exposure Visits and Training:** Budget on Farmers Inter-State Exposure Visits and Training Scheme of Ministry of Agriculture will prove as a powerful tool towards helping farmer bridge the yield gap. Crop productivity can be significantly increased by managing soil health and adopting the best management practices.

- 6. Development of Rainfed Agriculture :** The production problems and risks associated with rainfed farming have been articulated since the IV Five year Plan. It is known that rainfed agriculture produces more than half of India’s food grains. Rainfed farming communities ensure food security. They cultivate a significant share of area devoted to crops like pulses (77 per cent), oilseeds (66 per cent), and coarse cereals (85 per cent). They rear 78 per cent of the goats in the country. According to the National Rainfed Area Authority (NRAA), these farmers produce over 34 predominant crops (compared to the 3 or 4 crops in irrigated tracts), handle diverse crop livestock combinations and inland fisheries thereby maintaining India’s rich bio-diversity. Today, it is acknowledged that even with full coverage of the irrigation potential, about 50 per cent of arable land will continue to depend on rainfall. Farmers need decentralized location specific natural resource based knowledge and inputs for their farming systems. They are wary of the centralized supply driven input intensive commodity production technologies. Many of these technologies (though subsidized) were expensive and also depleting and deteriorating their land water and biological resources and driving them to penury.

It was recommended that besides watershed management, constructing check dams and farm ponds should be taken up on a mission mode for providing life saving irrigation for the crops. All efforts are needed for bringing 69 million hectare area under Micro-Irrigation to save water and input costs, increase productivity and improve quality of output for which Government has already launched “*Pradhan Mantri Krishi Sinchai Yojana*”. The area expansion and subsidy to the States must be linked with the adoption of precision agriculture model. At least 5 lakh farm ponds and dug wells in rainfed areas will be developed.





**7. Irrigation:** Irrigation is a critical input for increasing agriculture production and productivity. Out of 141 million hectares of net cultivated area in the country, only 46 per cent is covered with irrigation. The government is serious not only to increase irrigated area, but also to enhance water use efficiency. A brief description of various initiatives taken by the Government for irrigation development is given below.

**Pradhan Mantri Krishi Sinchai Yojana (PMKSY):** The major objectives of the PMKSY is to achieve convergence of investment in irrigation at the field level, expand cultivable area under assured irrigation, improve on-farm water use efficiency to reduce wastage of water, enhance the adoption of irrigation, and adoption of water saving technologies (More Crop Per Drop), enhance recharge of aquifers and introduce sustainable water conservation practices by exploring the feasibility of reusing treated municipal based water for peri-urban agriculture and attract greater private investment in precision irrigation system. The 'Pradhan Mantri Krishi Sinchai Yojana' has been strengthened and will be implemented in mission mode. 28.5 lakh hectares will be brought under irrigation under this Scheme.

**Long Term Irrigation Fund:** A dedicated Long Term Irrigation Fund will be created in NABARD with an initial corpus of about Rs 20,000 crore. To achieve all these, a total provision of Rs.12,517

crore has been made through budgetary support and market borrowings in 2016-17.

**Sustainable Management of Ground Water Resources :** Simultaneously, a major programme for sustainable management of ground water resources has been prepared with an estimated cost of Rs. 6,000 crore and proposed for multilateral funding.

**Promoting Scientific Agriculture Through Micro-Irrigation:** Promoting micro-irrigation (drip and sprinkler system) and fertigation, on a very large scale, can be highly efficient towards increasing water and nutrient use efficiency. Priority should, therefore, be given to empower farmers with micro-irrigation. Advanced concept of Precision Agriculture need to be promoted on a large scale, emulating the success of Tamil Nadu Precision Farming Project (TNPFP). A National Project on Precision Agriculture on the pattern of TNPFP should be launched with an integrated approach from advance production technologies to formation of FPOs and linking them with the markets. Studies done by LSE, Harvard, IIM-A and other premier global institutions show an increase of 80% to 600% extra yields in different crops under Tamil Nadu Precision farming Project.

#### **8. Reducing Crop Losses from Pests:**

Crop losses in India are huge and estimates range from Rs. 90,000 to Rs. 1.50 lac crores annually. Pesticides play an important role not only in crop productivity, cost reduction and

quality improvement, but also in protecting crops from pests and diseases. The cost benefit ratio in using pesticides is heavily in favour of farmers. The Government however, needs to check flood of spurious pesticides in market by fly-by-night operators by regulating registrations, strengthening quality enforcement and tackling corruption through provisions of joint testing of samples.

#### 9. Biotechnology:

Biotechnology has the potential to increase productivity in crops and facilitate incorporation of genes for resistance to pests, diseases and abiotic stresses and is set to play a critical role in crop and livestock production by enhancing yields, nutritional profile, stress tolerance and crop protection. India must have a clear vision of the GM crops. As per studies, BT cotton alone has contributed more than Rs. 80,000 crores of additional output value to farmers. Similar potential many other crops may have for Indian agriculture and towards enhancing farmers profitability.

#### 10. Farm Mechanization:

Farm Mechanization in India has been a story of tractorization. Time has come for promoting efficient equipments and tools and small engine driven tractors to address small farm requirements adequately. Through a mix of specialized CHCs and with State Agros, Cooperatives and input dealers developing and custom hiring facility in farm mechanization should be given high focus. Through MANAGE network of ACABCs, Custom Hiring Centres can be promoted effectively by enhanced incentivization and by provisioning



to hire agribusiness consulting companies by MANAGE/States for promoting CHCs among ACABCs.

#### 11. Agricultural Credit:

Suicide by the farmers after having failed in breaking the credit net of local financiers, is very often heard of. To improve credit support, government has increased the target of agricultural funding Rs. 50,000 cr. to 8.5 lakh crore (cr). For 2015-16, the NABARD had projected an annual credit potential of Rs. 47,756.43 cr. pre for some of the priority sectors including water resources, land development, farm mechanization, dairy, poultry, fishery, construction of storage go-downs and market yards and promoting renewable sources of energy and waste management.

#### 12. Farm Insurance:

The government has initiated new insurance scheme wherein, the farmer would be able to at least recover the basic inputs that he puts in, in the event of uncertainties created by more than one reasons.

#### Towards Doubling Farmers' Income By 2022 :

It is to be noted that at this point of economic history, "Doubling Farmers Income" is imperative rather than being an option and it has been one of the most important activities of the present day government. The budgetary allocation of the Agriculture and Farmers Welfare Ministry for 2018-19 has been kept at Rs. 58,080 crore as against Rs. 51,576 crore for 2017-18, for the emancipation of the sector this year, but there are many wings of this sole bird called Agriculture.

To double the income of farmers by 2022, in nominal (numerical) terms, which do not take inflation into account, would require a 15% compounded income growth rate, which is a marginal increase over the achieved increase from 2003 to 2013. However, to increase the income in real terms would imply restructuring agriculture processes and policy interventions. There is, however, almost unanimity that the net income of farmers can surely be doubled well within the period of four years. A total of 40 recommendations for increasing incomes of farmers, have been divided into five parts, as under:

1. Increasing incomes by improving crop productivity.

2. Water and agricultural input policies.
3. Integrated Farming System .
4. Better market price realization .
5. Special Policy Measures.

Based on the recommendations of National Commission on Farmers, Government announced measuring agricultural progress by real income of farmers and not by gross production of agricultural commodities. The Finance Minister in his Budget 2016 Speech mentioned about doubling farm incomes. Later, the Prime Minister gave a clarion call to the nation of doubling farmers' by 2022 by spelling out 5-point strategy. Accordingly a Task Group has been formed by the Ministry of Agriculture to come out with a detailed plan and its operationalization. In this context, Indian Council of Food and Agriculture organized a national consultation on 30 April, 2016 in New Delhi, involving top experts from the Government, industry, research and academic bodies, farmers organizations, parliamentarians and NGOs. The meet was chaired by Prof. MS Swaminathan. Let us explore the various fronts as summarized below :

### 1. Diversification of Agriculture :

Diversification of agriculture in the First Green Revolution areas such as Punjab, Haryana and Western U.P. seems to be the need of the hour. To promote diversification on ecological principles, will require making monetary equivalence (profit margin) between the replaced crop/commodity and enterprise with the ones planned to be introduced. Farmer is mainly concerned with the profit he gets from a particular crop or commodity. Crops like maize, soybean, pulses, oilseeds, fruits and vegetables have the potential to replace rice and wheat in this area. Upward push in MSP in favour of proposed diversification crops will be a practical option to achieve this objective.

### 2. Promotion of Intensive Vegetable Production:

Promotion of intensive vegetable production using improved varieties, organic manure and drip irrigation, can provide five times higher annual income, to the tune of Rs. 2 lakhs per acre (BAIF's experience in Andhra Pradesh, Karnataka and Maharashtra). Farmers in semi-arid areas with 2-3 cows or 8-10 goats and cultivating dual purpose food grain crops on 0.4 ha land, have been earning Rs. 60,000–

75,000 per annum. With efficient watershed development, land use planning and selecting of suitable crops, the income of the farmers can go up by 80-100% to generate an annual income of Rs. 40,000 to Rs. 60,000.

### 3. Integrated Farming System:

The promotion of Integrated farming System Approach involving synergic blending of crops, horticulture, dairy, fisheries, poultry, apiculture, sericulture, goatary, piggery, mushroom cultivation etc. seems viable option to provide regular income and at site employment to small land holder, decreasing cultivation cost through multiple use of resources and providing much needed resilience for predicted climate change scenario. Model Farms @ Rs. 200 lacs each need to be established in each district with 100% Gol funds for farmers to learn and adopt.

### 4. Dairy Husbandry and Fisheries:

To meet the working capital needs of small and marginal farmers in fisheries and animal husbandry sector, the government has extended the facility of Kisan Credit Cards (KCC) to the sector. This would give benefit of crop loan and interest subvention, so far available to agriculture sector only under Kisan Credit Cards (KCC), for rearing of cattle, buffalo, goat, sheep, poultry and fisheries. For Setting up of a Fisheries and Aquaculture Infrastructure Development Fund in fisheries sector and an Animal Husbandry, Infrastructure Development Fund for financing infrastructure requirement of animal husbandry sector has been allocated. Total Corpus of these two new Funds would be Rs.10,000 crore.

### 5. Better Market Price Realization(MSP):

Taking into cognizance the recommendations of the "National Commission on Farmers", Indian Council of Food and Agriculture involving top experts from the Government, industry, research and academic bodies, farmers organizations, parliamentarians and NGOs, several recommendations were made including pricing of agricultural produce. One of the most welcomed and appreciated points in this year's budget is the announcement of 1.5 times the expenses borne by farmers. The support price of the *khari* crops has been



increased aiming to increase the incomes from farm.

## 6. Operation Greens

This addresses price volatility of perishable commodities such as potatoes, tomatoes and onions at an outlay of 500 crore. This shall promote FPO, agri logistics and processing facilities and professional management in the sector. A 100% deduction in respect of profits to farmer producer companies having a turn over upto 100 crore for a period of 5 years from the Financial Year 2018-19 has been announced in order to encourage professionalism in post-harvest value addition in agriculture.

## 7. Development of Warehouses for Reducing Post Harvest Losses:

Reducing post-harvest losses by strengthening grain storage infrastructure, cool chain systems for perishables, post-harvest processing and value addition, transport, marketing, commerce and trade is essentially important. It was recommended to strengthen Agri infrastructure, storage systems and market yards. More multipurpose market yard complexes, comprised of godowns, cold storage, farmers service center etc. needs to be set up for farmers to directly participate, especially online in NAM. Enabling policy provisions can be done for large scale play of corporate in agricultural marketing and storage operations. The NABARD aims to create scientific storage space of 9.23 lakh ton by construction of godowns and warehouses by FCI.

## 8. Revision of the APMC Act :

It was recommended to amend APMC act by all the states to encourage competitive marketing environment and participation in NAM. Direct marketing and contract farming should be made easy for the farmers. Also to encourage the States for contract farming under which the buyer can provide the farmer access to modern technology, quality inputs, other support and a guaranteed price. A few experiments of direct procurement backed with technical support have shown to benefit the farmers in some States. Reforms to the APMC Acts to permit pan-India trades, electronic auctions and trading in warehousing receipts assume importance. Enactment of policies that

enforce the standardization of agricultural produce such that graded product would have a form of a logo or label mandatorily attached to it to signify that the product meets all the standardization and grading requirement for packing, sealing etc., and only traders who are willing to follow the regulation are given "Certificate of Authorization".

## 9. Launch of e-Nam :

The government would strengthen e-NAM, the e-trading platform for the National Agriculture Market and would expand coverage of e-NAM to 585 Agriculture Produce Marketing Companies (APMCs). Out of that, 470 APMCs have already been connected to the e-NAM network and the rest were proposed to be connected by March 2018. Also, an agri-infrastructure fund with a corpus of ₹2,000 crore will be set up for developing and upgrading agricultural marketing infrastructure in the 22,000 *grameen* (rural) agricultural markets and 585 APMCs". Upgradation of 22,000 rural *haats* into grain agricultural markets is another appreciable attempt. Indian Council of Food and Agriculture recommended that launch of NAM requires easing of norms of licensing to enable seamless participation of buyers from across the country, movements of goods without restriction, harmonization of tax laws (including a uniform GST), standardization of grades and recognition of electronic trades. Exchanges would also have to widen the participation by facilitating farmers to take positions through cooperative or other aggregators such FPOs.

## Conclusion:

The agriculture centric rural development is the key to transforming rural lives. To achieve this, all out efforts are needed to enhance crop productivity through adoption of improved farm technologies in a holistic way and ensuring reasonable price of the farm produce. Diversification of agriculture on the principle of Integrated Farming involving agriculture and allied sector (dairy, fisheries, bee keeping, sericulture, goatery, piggery, mushrooms, food processing, fruit preservation) etc. would be essential and inevitable.

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# SKILL DEVELOPMENT AND EMPLOYMENT FOR RURAL YOUTH

A. Srija

According to World Bank, about 13 million people enter the working age every year but only 3 million new jobs are created every year. The demographic advantage being predominantly in the rural areas, the need of the hour is to improve the skill set of the labour force such that they are productively engaged in the job roles emerging from Digital India, rural road connectivity, development of smart cities, expressways, Swachh Bharat-Grameen etc.

To capitalize on India's demographic advantage, the first National Policy for Skill Development was formulated in 2009. The policy aimed to increase the capacity and capability of the existing skill system to ensure equitable access to all, promote life-long learning, maintain quality and relevance according to the changing requirements create convergence between school education, various skill development efforts of Government and between Government and private sector, enhance capacity of the training institutions among other objectives. The National Policy on Skill Development, 2009 set a target for skilling 500 million persons by 2022 involving all stakeholders including the concerned Ministries and Departments. The Policy also provided for a review after five years.

Accordingly, taking into consideration the changes in the skill ecosystem and from the experience gained through implementation of the skill development programmes, the new National Policy for Skill Development and Entrepreneurship was announced in 2015. This Policy aims to scale up skilling initiatives with speed, standard (quality) and sustainability. It provides for an umbrella framework for all skilling activities taking place in the government, industry and NGO sector and provides skilling for both wage and self-employment by bringing within its mandate entrepreneurship. The policy also aims for standardization of skilling standards across sectors by insisting on mandatorily accessing to the National Skill Qualification Framework. The Common Norms guidelines were introduced in 2015 to bring about uniformity in the skill development programmes being implemented across different Central Ministries/Departments. The guideline specifies the input standards, outcomes, funding norms, fund flow mechanism, mechanism for monitoring & tracking, and empanelment of training providers and assessors. There are about

20 Central Ministries/Departments providing skill training through more than 40 different schemes based on the Common Norms.

The institutional infrastructure for skill development consists of the National Skill Development Agency (NSDA), the National Skill Development Corporation (NSDC) and the National Skill Development Fund (NSDF). In 2014, these were subsumed under the newly created Department of Skill Development & Entrepreneurship later converted to the Ministry of Skill Development & Entrepreneurship in 2015. At the State level, the States are encouraged to set up the State Skill Development Missions to serve as the nodal agency for implementation of the skill development programmes.

The National Skill Development Agency (NSDA) has undertaken various activities like anchoring and operationalizing the National Skill Qualification Framework (NSQF), developing National Qualifications Register (NQR) which is a repository of all approved qualifications, develop a National Quality Assurance Framework (NQAF), create and maintain a national database on skill development including development of a dynamic Labour Market Information System.



The National Policy for Skill Development & Entrepreneurship, 2015 identifies the incremental human resource requirement across 24 key sectors as 109.73 million and the new entrants to the labour force as 104.62 million by 2022. About 298.25 million of the existing workforce would require Recognition of Prior Learning (RPL), reskilling and upskilling and 104.62 million would require fresh skilling by 2022.



### I. Skilling Programmes for Rural Youth:

#### Pradhan Mantri Kaushal Vikas Yojana (PMKVY) :

The Pradhan Mantri Kaushal Vikas Yojana, the flagship scheme on skilling was launched in 2015 to provide industry relevant skill training to the youth to enable them secure a better livelihood. The scheme provides short-term training to the job seekers as well as **Recognition of Prior Learning (RPL)** to the existing workforce through accredited and affiliated training partner/training centers and ensures placement. The scheme runs across 252 job roles related to 35 Sector Skill Councils. The PMKVY was first launched in 2015-16 and owing to its success the scheme was re-launched as PMKVY 2.0 for the period 2016-2020. In order to ensure quality and standardization in the training, various steps have been taken such as: one stop web-based solution for Centre Accreditation, Accreditation Standards Grading Metrics to benchmark the training centres across the country, evaluation of training centres for their continuous performance related to monitoring standards such as placements, branding, infrastructure etc., mandating aadhaar based biometric attendance for trainees, trainers and assessors, incentivizing training centres for providing placement to trained candidates etc.

As of December, 2017 about 40.5 lakh candidates have been trained of which 27.76 lakh received short-term training and 7.76 lakh received RPL and 5 lakh are undergoing training. The scheme has placed special importance to placements which includes entrepreneurship. The scheme also lays focus on skilling women by providing travelling allowance of Rs.1000/1500 per month for the trainees and post placement support at the rate of Rs. 1450 per month for two/three months depending upon domicile or outside domicile placement.

There are projects focusing on tribal populations under PMKVY. For eg: (i) **Bru Project:** The project aims for skilling of Bru tribe of Mizoram, who were displaced and currently living in the Internally Displaced Person (IDP) camps in the districts of North Tripura. (ii) **Katkari primitive tribe:** Project aims to skill 1020 candidates from the Katkari tribe of Maharashtra. (iii) **Skilling in Odisha:** Project aims to skill 12,000 candidates from 62 indigenous communities (tribes) of Odisha, of which 13 are classified as primitive. (iv) **Project YUVA** is a joint initiative of NSDC and the Delhi Police under which Delhi Police is to connect young 3,000 deprived youth across the capital by upgrading their skill as per their capability after which, they are given placement assistance. The Project is to prevent the youth from committing crime and delinquent acts as well as to encourage them to partner with police in maintaining law and order. At present, 715 candidates have been enrolled of which 390 have been trained and 240 have been placed in companies.

#### Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY):

The DDU-GKY is a placement linked skill-training programme to empower rural poor youth with employable skills and facilitate their participation in the labour market. As of October, 2017, the DDU-GKY has over 566 Training Centers in 674 Projects, in partnership with over 310 Project Implementing Agencies conducting training across 39 sectors, covering 329 job roles spread across 28 States. Against a target of skilling 2 lakh candidates during 2017-18, over 83,745 candidates have already been trained, of which over 46,654 candidates have been placed in jobs. The Ministry has selected 12 new Champion Employers and entered into a MoU with them for high quality training and placements.



Under DDU-GKY, the youth are provided the option to register themselves for skilling through the app 'Kaushal Panjee' or Skill Register. This enables rural youth to remain connected with the Training Partners and Banks and be informed about nearby mobilization camps, training centres, job melas and start of new batches of training etc.

### **Rural Self Employment Training Institutes (RSETIs):**

The Ministry of Rural Development has been implementing the Rural Self Employment Training Institutes (RSETIs) for the rural youth which seeks to diversify household income of rural poor. RSETI is a three-way partnership amongst Ministry of Rural Development, State Government and Banks. There are 31 participating banks, which have set up 586 RSETIs in the country. RSETIs provide training in agriculture, process, product and general entrepreneurship development programmes (EDP) courses to candidates leading to self employment/wage employment. Against a target of skilling 3.97 lakh candidates during 2017-18, 2.35 lakh candidates have been trained and 1.55 lakh have been settled. The Startup Village Entrepreneurship Programme (SVEP) helps the rural poor including artisans and weavers to set up enterprises at the village level in non-agricultural sectors. It is estimated that Startup Village Entrepreneurship Programme (SVEP) has generated employment opportunities for 24,509 persons as on 31st December, 2017.

### **Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA):**

Aiming to empower and uplift the rural youth the Ministry of Skill Development & Entrepreneurship in partnership with the Ministry of Power has under the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) initiated vocational training of rural youth **in six States viz; Assam, Bihar, Madhya Pradesh, Jharkhand, Odisha and Uttar Pradesh**. The youth are to be trained in two job roles viz; Lineman Distribution (Multi skilled) and Technical Helper. The objective of this skill training programme is to meet the need for trained manpower for implementing the larger mandate of the scheme i.e. to ensure access to electricity in every household of the country. A total of around 47000 youth in the six focus States and more than 55000 across the country would be trained. The training infrastructure available with ITIs as well as infrastructure available with the State

Power Distribution Utilities would be utilized for skill training under the scheme.

### **Partnership Skill Initiatives:**

**MoU signing with Ministry of Water Resources:** An MoU was signed between Ministry of Skill Development & Entrepreneurship and Ministry of Water Resources, River Development & Ganga Rejuvenation for developing skilled manpower for the Namami Gange project.

**MoU signing with BSF and Assam Rifles:** An MoU was signed between National Skill Development Fund (NSDF), NSDC and Border Security Force (BSF) with the objective to provide gainful employment to the serving, retiring and retired BSF personnel and their families ensuring the successful alignment to NSQF based skill training to them at multi-skill development centers run by BSF. A similar MoU was signed with Assam Rifles as well.

**MoU for Urja Ganga Gas Pipeline Project:** In order to provide the skilled manpower for Urja Ganga Gas Pipeline Project, a quadripartite agreement has been signed between NSDC, GAIL, Skill Development Institute (SDI), Bhubaneswar and LabourNet. MoU is to promote and enhance seamless skill development activities related to Urja Ganga Gas Pipeline Project to ensure high levels of quality and productivity in the execution of the project & provide gainful employment to large number of youth.

### **Pradhan Mantri Kaushal Kendras:**

The need for modernized training equipments that is on par with the industry needs is essential for providing skill training. The Pradhan Mantri Kaushal Kendras (PMKKs) are the model skill development centres that focus on building industry standardized skill development infrastructure, training and also placement. As of December 2017, 527 PMKKs have been allocated across 27 States covering 484 districts. Out of these, 328 PMKKs have been established.

### **Indian Institute of Skills (IIS):**

These are state-of-the-art Center of Excellence being set up across five regions of India on the lines of ITE<sup>1</sup> Singapore. The construction for the first IIS is in Mumbai, in collaboration with Tata Group. The IIS will provide "hands-on" training in advanced courses such as energy efficient construction, industrial electronics and automation etc.

<sup>1</sup> Institute of Technical Education

### Fee Based Trainings:

Under the Fee based model of skill development training being implemented by NSDC, more than 74 lakh have been trained. In 2017, of the 7 lakh candidates enrolled, more than 50 per cent are placed in job roles in demand such as masonry, sales technicians, refrigeration mechanic, insurance training, field technician for washing machines etc.

### Takshashila (Trainers and Assessors Portal)

National Portal for Trainers and Assessors is an initiative of NSDC. The portal is a dedicated platform towards the management of trainers and assessors training life-cycle and would function as the central repository of information concerning the development of quality Trainers and Assessors in the Indian skill ecosystem. It is built in with a feature to search trainers and assessors trained by SSCs across states, sectors and job roles for access to a pool of qualified and skilled professionals.

### Vocationalisation of Secondary and Higher Secondary Education:

The Ministry of Skill Development & Entrepreneurship in collaboration with Ministry of Human Resource Development has taken a number of initiatives towards integrating skills and education. Under the scheme, vocational education is provided to a large number of students in selected schools. UGC is offering Bachelor of Vocation Programmes in a number of colleges/universities. Academic Equivalence with 10<sup>th</sup> and 12<sup>th</sup> classes has been provided to ITI students through National Institute of Open Schooling (NIOS) by means of credit transfer. In addition, Degree Apprenticeships has been identified as an alternative education route by dovetailing apprenticeship component within formal education.

### Skill Development in LWE Districts:

Skill development programmes have been implemented in 47 districts affected by Left Wing Extremism across 10 States so that the youth of those districts can have a decent livelihood by way of acquiring skill.

### UDAAN:

Udaan is a special initiative to address the needs of the educated unemployed in Jammu & Kashmir (J&K). The scheme aims to enhance the skill and employability of graduates/post-graduates and



3-year engineering diploma holders to offer them jobs in the private sector. The scheme is implemented by NSDC through private sector participation. About 84 corporates have participated in Udaan Mega selection drives selecting candidates for training.

### Himayat

Himayat is a training-cum-placement programme for the unemployed youth mainly school/college dropouts of J&K. The youth are provided short-term training for at least 3 months, in a range of skills for which there is good market demand. At the end of the training, there is one year post-placement tracking to see how they are faring.

### National Career Service:

The National Career Service (NCS) project comprises of a digital portal that provides a nationwide online platform for the job seekers and employers for job matching in a dynamic, efficient and responsive manner and has a repository of career content. As of 31<sup>st</sup> March, 2018, 14.87 lakh employers and 4.24 crore job seekers were registered on the portal and 8.61 lakh job vacancies were mobilized. To enhance the reach and enrich the employment opportunities available to youth, 22 strategic MoUs have been signed with leading job portals, placement organizations and institutions of repute. Government of India has made it mandatory for government vacancies to be posted on the NCS Portal.

### Pradhan Mantri Yuva Udyami Vikas Abhiyan (PM-YUVA):

The scheme aims to create an enabling ecosystem for entrepreneurship development through entrepreneurship education and training across the country in select Institutes of Higher



Learning (Universities, Colleges and Premier Institutes), schools, Industrial Training Centers (ITIs) and Entrepreneurship Development Centers (EDCs) for over a period of five years (2017-18 to 2021-22). Additionally, students will get easy access to a robust network of peers, mentors, incubators, funds and business services through an online platform. So far, 239 Institutes of Higher Learning have been empanelled to impart entrepreneurship education and entrepreneurship courses have started in more than 200 Institutes of Higher Learning. An end-to-end customized entrepreneurship orientation module has been integrated under the Life Skill Course module of PMKVY Courses so that every candidate undergoing PMKVY skill training will receive orientation in Entrepreneurship. In ITI courses also, the module on Entrepreneurship is already integrated as a section in the employability skills.

## II. Employment Generation of Rural Youth:

To facilitate an environment for job creation and employment generation in rural areas, various programmes are in operation. The Mahatma Gandhi National Rural Employment Guarantee scheme (MGNREGS) aims at social inclusion through creation of productive assets as well as enhance livelihood security by providing atleast 100 days of guaranteed wage employment in a financial year to every adult member of a household who volunteer to do unskilled manual work. In recent years emphasis is on construction of rural infrastructure through convergence with MGNREGA such as Individual Household Latrines (IHHL) for PMAY-G beneficiaries, infrastructure for agricultural and allied activities etc. During 2017-18, 4.63 crore households were provided employment in 163 lakh works and in the process, 182 crore person-days of employment was generated.

The Ministry of Micro, Small & Medium Enterprises (MSME) is implementing the Prime Minister's Employment Generation Programme (PMEGP), which is a major credit-linked subsidy programme aimed at generating self-employment opportunities through establishment of micro-enterprises in the non-farm sector by helping traditional artisans and unemployed youth.

The Stand-Up India scheme launched in April 2016 facilitates bank loans from Commercial banks ranging between Rs. 10 lakh-1 Crore to atleast one SC/ST borrower and at least one woman borrower per bank branch for setting up greenfield enterprises in trading, services or manufacturing sector. As of

December, 2017 48,778 loans have been extended under the scheme.

The Pradhan Mantri MUDRA Yojana launched in 2015 extends collateral free loans below Rs. 10 lakh in the non-agricultural sector to individuals to enable them to set up or expand their business activities. It is divided into three categories namely Shishu (upto Rs. 50,000), Kishore (Rs. 50,000-Rs. 5 Lakh) and Tarun (Rs. 5 Lakh-Rs. 10 Lakh). A total of about Rs 4.6 lakh crore in credit has been disbursed through 10.38 crore MUDRA loans. 76 per cent loan beneficiaries were women and 50 per cent belonged to SCs, STs and OBCs.

To promote formal employment, under the Pradhan Mantri Rojgar Protsahan Yojana (PMRPY), 8.33 per cent of employer's contribution under Employees' Pension Scheme (EPS) for new recruits earning upto Rs.15000 per month is paid by the government for three years and in labour-intensive sectors like textiles, leather and footwear 12 per cent of employers' contribution under EPF is paid by the Government for a period of three years.

## Way Forward:

According to World Bank, about 13 million people enter the working age every year but only 3 million new jobs are created every year. The demographic advantage being predominantly in the rural areas, the need of the hour is to improve the skill set of the labour force such that they are productively engaged in the job roles emerging from Digital India, rural road connectivity, development of smart cities, expressways, Swachh Bharat-Grameen etc.

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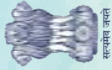
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Narendra Modi  
Prime Minister

"Yoga embodies unity of mind and body;  
thought and action; restraint and fulfillment;  
harmony between man and nature;  
a holistic approach to health and well-being."



Government of India  
Ministry of AYUSH



Yoga for Harmony & Peace

# Plan, prepare and let a new YOU emerge through YOGA.



JUNE 21, 2018  
INTERNATIONAL DAY OF YOGA (IDY)

### YOGA - INDIA'S UNIQUE GIFT TO HUMAN KIND

- Concept and practice of Yoga originated in India and was spread across the world by the Great Indian Masters.
- Yoga is accessible to all.
- Yoga benefits everyone who practices it.
- Yoga leads to liberation in every aspect of life.

### A GLOBAL MOVEMENT FOR HEALTH & WELLNESS

- IDY was instituted in 2014 by UN after PM Narendra Modi's proposal.
- Two Guinness World Records were registered in IDY 2015.
- 192 United Nation Member States observed IDY 2016.
- Thousands of Yoga enthusiasts participated in IDY 2017 led by the PM.

### IDY 2018 - ACTIVITIES

- Emphasis on uniform and harmonious Mass Yoga Demonstrations on 21<sup>st</sup> June, 2018.
- Mass Yoga Demonstrations to be based on Common Yoga Protocol (CYP).
- IDY events to be initiated by communities / groups at thousands of venues across the country.

### COMMON YOGA PROTOCOL (CYP)

- A specific sequence-wise arrangement of Yogic Practices developed to facilitate uniformity and harmony in Mass Yoga Demonstrations.
- 45 Minutes of Yoga can be learnt in 15 sessions of 1 hour duration each.
- Free videos of CYP and e-book can be downloaded from the Ministry of AYUSH website.

### JOIN THE MOVEMENT!

- Everyone can contribute to IDY by facilitating CYP training programmes for various stakeholders.
- Yoga enthusiasts, practitioners and other individuals can organize and participate in the IDY activity in their locality on 21<sup>st</sup> June, 2018.

### TRANSFORM YOURSELF

- Start training yourself in CYP now.
- Look for a IDY 2018 Yoga camp in your locality or join a Yoga group.
- Enhance your knowledge about Yoga by reading standard books or visiting the Yoga portal of the Ministry of AYUSH.

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## REFORMING ELEMENTARY EDUCATION IN RURAL AREAS

Surbhi Jain and Purabi Pattanayak

A nationwide sub-programme under the Sarva Shiksha Abhiyan, ‘Padhe Bharat Badhe Bharat’ was launched in August, 2014 to improve language development by creating an enduring interest in reading and writing with comprehension, and to create a natural and positive interest in mathematics related to their physical and social world. Various steps have been taken by the States and UTs under this initiative by creating supplementary learning material and reading corners, providing activity kits etc. for children in early grades.

A nationwide sub-programme under the Sarva Shiksha Abhiyan, ‘Padhe Bharat Badhe Bharat’ was launched in August, 2014 to improve language development by creating an enduring interest in reading and writing with comprehension, and to create a natural and positive interest in mathematics related to their physical and social world. Various steps have been taken by the States and UTs under this initiative by creating supplementary learning material and reading corners, providing activity kits etc. for children in early grades.

Education is the most important tool for social, economic and political transformation and a key instrument for building an equitable society. A well-educated population, equipped with the relevant knowledge, attitudes and skills is essential for economic and social development in the twenty-first century. This holds true especially in India which has the world’s highest number of 10 to 24-year-olds<sup>1</sup> and who will lay the foundation of the country’s future. Further, as 70 per cent of the Indian population resides in rural areas, the focus of any educational policy has to be on the rural areas.

### India’s Commitment to Elementary Education:

With the formulation of National Policy on Education (NPE), 1986, India initiated a wide range of programmes for achieving the goal of Universalisation of Elementary Education (UEE). These efforts were intensified in the 1980s and 1990s through several schematic and programme interventions, such as Operation Black Board (OBB), Shiksha Karmi Project (SKP), Andhra Pradesh Primary Education Project (APPEP), Bihar Education Project (BEP), U.P. Basic Education Project (UPBEP),

Mahila Samakhyia (MS), Lok Jumbish Project (LJP), District Primary Education Programme (DPEP) and the Sarva Shiksha Abhiyan (SSA) – the flagship Centrally Sponsored Scheme in partnership with State Governments for UEE across the country. This was further strengthened with the passage of the Right of Children to Free and Compulsory Education (RTE) Act, 2009, effective since 1st April, 2010, which gave a legal mandate to provide free and compulsory elementary education to every child in the age group of 6-14 years. The norms of the SSA Scheme were aligned with the provisions of the RTE Act, 2009 to support States and UTs in the implementation of the Act.

The overall goals of SSA included universal access and retention, bridging of gender and social category gaps in education and enhancement of learning levels of children. SSA provided for a variety of interventions, including inter alia, opening of new schools, construction of schools and additional classrooms, toilets and drinking water, provisioning for teachers, periodic teacher training and academic resource support, textbooks and support for learning achievement. SSA was implemented across all districts of India and provided a wide but convergent framework for decentralized planning and implementation of all central and state government initiatives in elementary education. SSA was the single largest holistic programme in the country, addressing all aspects of elementary education and covering over one million elementary schools, Education Guarantee Scheme centres and Alternate and Innovative Education (AIE) centres, and reaching about 200 million children.

### Progress achieved at Elementary level:

During the last decade, India has made enormous progress towards universalizing access

to elementary education across urban and rural areas. Today, SSA has covered 19.67 crore children enrolled in 14.6 lakh elementary schools<sup>2</sup>. The spread of SSA is majorly in rural areas as these areas account for 85.4% of all elementary schools and 74.5% of total enrolment at elementary level. Thus, it is evident that initiatives undertaken for elementary education have the most impact in rural areas.



There has been enormous progress in the major educational indicators across all States and UTs. As per UDISE 2015-16, Gross Enrolment Ratio (GER) is 99.21% for primary and 92.81% for upper primary level, which indicates near universal enrolment at primary level. The Pupil Teacher Ratio (PTR) has improved from 32 in 2009-10 to 25 in 2015-16. The average annual dropout rate at primary level has come down from 6.76% in 2009-10 to 4.13% in 2014-15 as per UDISE, 2015-16. The transition rate from primary to upper primary has gone up from 85.17% in 2009-10 to 90.14% in 2014-15 as per UDISE, 2015-16. The Gender Parity Index (GPI) in 2014-15, indicating the gender balance in the total enrolment in schools at elementary level, has reached 0.93 for primary level and 0.95 at upper primary level.

There is no doubt that efforts made under the Scheme by States and UTs has resulted in enhanced access to schools but there have been concerns on the quality of education offered in these schools and whether children are 'learning' anything. This has enormous implications for the future generation as these children will grow to shape the course of development of the nation.

### **Recent Initiatives:**

Recognising the needed focus on the quality of education, the Central Government, in

collaboration with State Governments, has taken various initiatives to improve the learning levels of children. The main among them are:

'Padhe Bharat Badhe Bharat': Various research studies have proved that Classes I and II are the most important stages where children are introduced to the world of learning through language and numeracy. Children who fail to learn to read in the first two grades of school are likely to fall behind and have difficulty in learning other subjects as well. Thus, both early reading and writing with comprehension and early mathematics learning are critical to improve the quality of elementary education in the country. A nationwide sub-programme under the SSA, 'Padhe Bharat Badhe Bharat' was launched in August, 2014 to improve language development by creating an enduring interest in reading and writing with comprehension and to create a natural and positive interest in mathematics related to their physical and social world. It is based on the premise that children need meaningful, and socially relevant engagement with books, along with various opportunities to actively and purposefully engage with a variety of print based reading and writing activities. Various steps have been taken by the States and UTs under this initiative by creating supplementary learning material and reading corners, providing activity kits etc. for children in early grades. This initiative

is an effort towards helping children develop comprehensive basic skills laying down a strong foundation for acquiring advanced competencies.

A lacuna was felt that there are no specified benchmarks for teachers and children to be aimed to be achieved at end of every grade. Accordingly, the Central RTE Rules have been amended on 20th February, 2017 to get Learning Outcomes for every class and for every subject. The Learning Outcomes for each class in Languages (Hindi, English and Urdu), Mathematics, Environmental Studies, Science and Social Science up to the elementary stage had, accordingly, been finalized and shared with all States and UTs. These are available at [http://www.ncert.nic.in/departments/nie/dee/publication/Print\\_Material.html](http://www.ncert.nic.in/departments/nie/dee/publication/Print_Material.html). It will enable teachers and parents to ascertain whether children are learning the required skills more accurately and take corrective measures if required and provide enabling learning opportunities to all students.

Based on these Learning Outcomes, a nationwide National Achievement Survey (NAS), was conducted in 2017-18 across 700 districts in all 36 States and UTs for Classes 3, 5 and 8 in government and government aided schools. The learning levels of more than 20 lakh students from 1,10,000 schools were assessed making it perhaps one of the largest sample surveys of student learning achievement. A preliminary analysis has shown that children in rural and urban areas are at par in learning performance. District-wise and State-wise report cards have been generated and are available for public reference at <http://www.ncert.nic.in/programmes/NAS/Training.html>. The district report cards point out the specific class and subject-wise achievements in Learning Outcomes where the district needs improvement and targeted policy/pedagogy interventions are required. They give a valuable input in developing a strategy for effectively hitting the 'nail on its head' for improving quality. The State Report card also highlights the performance of the students in all the tested Learning Outcomes so that the authorities can plan teacher trainings and

any requisite policy inputs to bridge the learning gaps. A detailed analysis of these report cards would provide crucial inputs in formulation of education policy, planning and implementation at national, state, district and classroom levels for improving learning levels of children.

The teacher is the fulcrum of any education system and is the most important determining factor of what is going on in the class. The RTE Act, 2009 requires that all in-service teachers possess certain minimum professional qualifications. To ensure that all such teachers (around 13 lakh) acquire such qualifications, National Institute of Open Schooling (NIOS)<sup>3</sup> has been entrusted to provide an online 2 year course. The study material for the course has been prepared by NIOS in self-instructional mode and uploaded on the SWAYAM platform with Audio/Video lectures, printable/downloadable reading material, self-assessment tests through tests and quizzes and an online discussion forum for clearing the doubts. The process has been made very simple and interactive so that teachers make the best efforts to learn the requisite skills provided by the course and which will help them in carrying out their teaching responsibilities effectively. This is also perhaps the largest step taken to equip professionally a huge number of teachers at the same time and will surely make a difference to the provision of quality teaching in our country especially in rural areas.





The Central Government has also instituted the ‘Swachha Vidyalaya Puraskar’ from 2017 with the rationale to sensitize children towards cleanliness and imbibe hygienic habits and practices. This will also help in retaining children in schools, alleviate illnesses due to squalor and filth and develop responsible civic citizens of the future. In the very first year, more than 2.5 lakh government schools participated online of which 91% schools were from rural areas. The schools were inspected for overall cleanliness, drinking water system, toilet and classroom cleanliness. After a rigorous process of selection at district and State levels, 172 schools were selected for National Awards out of which 126 schools (73%- around two-thirds) were from rural areas. This manifests that schools in rural areas are nowhere lagging behind and can pose a tough competition to the best schools at the national level.

### **The Way Forward:**

The Central Government has now decided to look at school education from a holistic perspective rather than a segmented vision at various levels of primary, upper primary, secondary and senior secondary levels. The Centrally Sponsored Scheme of ‘Samagra Shiksha Abhiyan’ has been initiated from 2018-19 with the objective of provision of inclusive and equitable quality education from pre-school to senior secondary stage. It envisages that each and every child progresses smoothly and continuously through various levels of schooling without any barrier.

The programme also focuses on improving quality of education at all levels by integrating the school administration, teachers and students through the use of technology. A ‘paradigm shift’ is envisaged to raise the performance of the school education sector with supporting interventions for school effectiveness and sustainable institutional capacity. The emphasis of the Scheme is to incentivize States

towards improving quality of education with a special focus on educationally backward areas. The scheme also marks a transformation necessitating an equitable and inclusive learning approach with special focus on Children with Special needs (CWSN), girls and marginalized communities.

This integrated approach would enable exploration of new digital initiatives for strengthening in-service and pre-service teacher training and education with a focus on Creation of Digital Learning Material, Innovative Pedagogy and Capacity Building, etc. This would strengthen the quality of teaching in schools across all levels which would enable reaping the benefits of technology and widening the access of good quality education across all States, UTs and sections of the Society.

An educated society is an essential pre-requisite tool for a developed society. As a young India is rearing to progress, a strong foundation needs to be built with provision of quality education for its future generations. The various initiatives undertaken by the Government are certainly a step in the right direction to empower rural India.

### **Footnotes:**

‘World Population Prospects: The 2015 revision’ Population Database of United Nations Population Division

Source: U-DISE, 2015-16, NIEPA

Details available at <http://dled.nios.ac.in/>

Details available at <http://www.swachhvidyalaya.com>

*(Surbhi Jain is Director, Department of School Education & Literacy, and Purabi Pattanayak is Senior Consultant in Technical Support Group, Department of School Education & Literacy, Ministry of Human Resource and Development. Email: surbhi.jain@nic.in)*

# **Kurukshetra**

**FORTHCOMING ISSUE**

July 2018

:

Panchayati Raj

# BOLSTERING ROAD NETWORK IN RURAL AREAS

Ishita G. Tripathy

For the success of any programme, three 'A's are important, viz. availability, affordability and accessibility. While there is no denying that in the recent past, there have been a number of Government initiatives to make health, nutrition, education, housing, electrification and banking, available and affordable, the fact remains that roads provide in the hinterland the fundamental link to the third 'A', viz. 'accessibility'. An efficient, reliable, safe and quality road infrastructure is an essential complement for the execution of well-thought out developmental strategies and a natural pre-requisite for an effective development process.

Construction, development and maintenance of roads are not an end in themselves, but a means to ensure that economic development is all pervasive and reaches one and all. Undoubtedly, roads are the spinal cord of developmental outreach in a country like India. Awareness about Government public welfare programmes and effective delivery of public services hinge critically on the network spread and quality of roads. The successful implementation of programmes and schemes and their quality performance largely depend on whether Government functionaries and NGOs are able to ensure timely and door-step delivery of public services. For the success of any programme, three 'A's are important, viz. availability, affordability and accessibility. While there is no denying that in the recent past, there have been a number of Government initiatives to make health, nutrition, education, housing, electrification and banking, available and affordable, the fact remains that roads provide in the hinterland the fundamental link to the third 'A', viz. 'accessibility'.

## Rural Network:

Government of India's Ministry of Road Transport & Highways categorizes India's road

network into national highways, state highways, district roads, project roads, urban roads and rural roads. Out of these categories, the growth in rural roads in recent years has been the most rapid. Between 2010-11 and 2014-15, the rural road network grew by 21.4% from 27.50 lakh km to 33.37 lakh km. During the year 2015-16, the growth in the network was 17.9% and the total rural road length was 39.35 lakh km. This network comprises as much as 70% of the total network in the country.

Government of India defines the four constituents of rural roads as (i) Panchayati Raj roads, which include those constructed by Zila Parishads, Panchayat Samitis and Gram Sabhas; (ii) those constructed under Ministry of Rural Development's Pradhan Mantri Gram Sadak Yojana (PMGSY); (iii) those constructed by State Public Works Department; and (iv) those which were constructed under the erstwhile Jawahar Rozgar Yojana (JRY). Panchayati Raj roads form the largest share of 47% of the total rural road network. The share of the other three constituents is 16%, 15% and 23%, respectively.



**Table-1: Length of Roads, as on 31<sup>st</sup> March, 2016 and Saturation of Schemes under Gram Swaraj Abhiyan States with the Largest Rural Road Network**

States/ UTs	Road Network			Saturation under Gram Swaraj Abhiyan						
	Total Length of Rural Roads, except roads constructed under Jawahar-Rozgar Yojana*	Length of Surfaced Rural Roads as a Proportion of total length of rural roads	Total Length of Rural Roads per 1,000 Rural Population	Ujjwala	Saubhagya	Ujala	Pradhan Mantri Jan Dhan Yojana	Pradhan Mantri Jeevan Jyoti Yojana	Pradhan Mantri Suraksha Bima Yojana	Mission Indradhanush
	(in km)	(in %)	(in km)							
Maharashtra	4,13,146	74	7	99	100	93	116	75	98	93
Assam	2,91,933	17	273	64	24	98	111	86	104	97
Uttar Pradesh	2,45,396	91	9	100	67	78	135	135	135	101
Odisha	2,17,919	99	2	87	100	40	107	36	94	97
Madhya Pradesh	2,03,542	90	10	100	100	100	114	110	118	98
Karnataka	2,00,389	52	363	100	100	93	117	110	119	100
West Bengal	1,91,354	22	6	100	100	100	115	75	99	98
Andhra Pradesh & Telangana	1,79,306	54	11	100	86	100	102	88	98	98
Bihar	1,75,373	57	28	100	100	100	101	101	101	103
Rajasthan	1,71,259	77	19	100	86	100	102	88	98	98

\* The State-wise break-up of JRY roads is not available in the public domain.

Sources: 1. Census of India, 2011, Registrar General of India 2. Basic Road Statistics of India, 2015-16, Ministry of Road Transport & Highways. 3. Gram Swaraj Abhiyan website [www.gsa.nic.in](http://www.gsa.nic.in) (accessed on 12th May, 2018)

### PMGSY: A Revolution in Rural Road Network

Out of these components of rural roads, construction of roads under PMGSY commenced in 2000, with the objective of providing fair weather roads to unconnected habitations as part of a poverty reduction strategy. Indeed the progress of construction of roads under PMGSY has been fast-paced. The proportion of surfaced roads too for PMGSY roads is high at 88%, compared to those of other categories. Around 83.5% State PWD roads, 54% of Panchayati roads and 20% JRY roads are surfaced.

In terms of absolute length of total rural road network, the top ten States in decreasing order are Maharashtra, Assam, Uttar Pradesh, Odisha, Madhya Pradesh, Karnataka, West Bengal, Andhra Pradesh & Telangana<sup>1</sup>, Bihar and Rajasthan (Table-1). In relative terms, if the length of rural roads is normalized by their availability per 1,000 rural population, Karnataka and Assam are far ahead of the other States. Out of the States presented in Table-1, some States like Odisha, Uttar Pradesh and Madhya Pradesh have a very high proportion of surfaced rural roads. In contrast, the proportion of surfaced rural roads in Assam is 17%.

### Gram Swaraj Abhiyan & Rural Roads:

Roads are a means of delivering services at

the door-step. From 14<sup>th</sup> April to 5<sup>th</sup> May, 2018, the Government of India had launched the 'Gram Swaraj Abhiyan'. Objectives of the campaign entailed spreading awareness about pro-poor initiatives of government and achieving saturation of eligible households/persons under seven flagship pro-poor programmes in more than 20,000 identified villages, viz. (i) Pradhan Mantri Ujjwala Yojana, (ii) Saubhagya, (iii) UJALA or Unnat Jeevan by Affordable LEDs for All scheme, (iv) Pradhan Mantri Jan Dhan Yojana, (v) Pradhan Mantri Jeevan Jyoti Bima Yojana, (vi) Pradhan Mantri Suraksha Bima Yojana and (vii) Mission Indradhanush.

Pradhan Mantri Ujjwala Yojana aims to safeguard the health of women and children by providing them with a clean cooking fuel, i.e. LPG. While under Pradhan Mantri Sahaj Bijli Har Ghar Yojana: 'Saubhagya' free electricity connections are to be provided to all households in rural areas, the UJALA scheme provides affordable LEDs to the poor. The Pradhan Mantri Jan Dhan Yojana is a comprehensive National Mission for Financial Inclusion. While the Pradhan Mantri Jeevan Jyoti Bima Yojana is a life insurance scheme offering coverage of Rs. 2 lakh, at a premium of Rs. 330 per annum for death due to any reason, the Pradhan Mantri Suraksha Bima Yojana is a risk coverage of Rs. 2 lakh for accidental death and permanent



total disability and Rs. 1 lakh for permanent partial disability, at a premium of Rs. 12 per year payable through auto-debit from subscribers' bank-account. The seventh scheme, Mission Indradhanush, aims to immunize all children under the age of 2 years and pregnant women, against vaccine preventable diseases.

### Road Networks and Gram Swaraj Abhiyan

Table-1 depicts the performance of the seven schemes in the States which have the largest rural road network. As evident, except for the Saubhagya scheme in Assam and the Ujala and Jeevan Jyoti schemes in Odisha, high levels of saturation have been achieved under most of the schemes in the States with the largest rural road networks, thus, validating the hypothesis that if delivery of services is the end, one of the vital means to achieve it is to bolster the road connectivity. Some States like Tamil Nadu have achieved 100% saturation in three of the schemes and more than 100% saturation in the remaining.

### Road Safety:

A very crucial aspect of road development is road safety. However, data reflect that rural areas in the country account for the larger share of road accidents, especially fatal ones. Further, rural areas also have a higher number of persons who are injured and killed in road accidents as compared to urban areas (Table-2).

### The Way Out:

The importance of rural roads has already been outlined above, but a lot more needs to be done. An efficient, reliable, safe and quality road infrastructure is an essential complement for the execution of well-thought out developmental strategies and a natural pre-requisite for an effective development process. To ascertain that rural roads are indeed able to achieve the objective for which they are constructed, decision-makers and stakeholders may like to keep the following in mind:

- Pragmatic planning is a necessary pre-cursor to effective implementation.
- Budgetary requirements of construction have been increasing. It is important that adequate allocations are made and the money is disbursed on time.
- Mere construction is not enough. Maintenance of the asset created is equally important.

**Table-2: Rural Road Safety, 2016**

Area	Total No. of Accidents	No. of Fatal Accidents	No. of Persons Killed	No. of Persons Injured
Rural	2,63,839	82,584	92,945	2,82,278
% of Total	54.9%	60.7%	61.6%	57.1%

*(Source: Road Accidents in India, 2016, Ministry of Road Transport & Highways, GoI)*

- The importance of carriage-way width cannot be ignored. This aspect, along with the issues of gradient of the roads and shoulders, if any, need to be addressed appropriately. It is important to keep in mind that maintenance cost of all-weather roads would be low.
- It is well established that road safety relies on 5 'Es'. Of these, 'Engineering of roads' figures prominently, while the other 'Es' are 'Engineering of vehicles', 'Education and awareness of citizens, especially drivers and other road users', 'Enforcement of traffic rules' and 'Emergency post-accident care'. Therefore, instead of merely focusing on road development to provide point to point rural connectivity and thereafter taking post-accident corrective measure, it is imperative that adequate attention is to be paid to 'Engineering of roads' at the outset.
- Any effective policy needs to be backed by consistent data. Currently, since the construction and maintenance of rural roads are done by various agencies, there is no centralized body which maintains all rural road statistics. This becomes a handicap in taking a holistic view for policy formulation.
- There is a need for a prudent call to balance the socio-economic benefits of a large road network vis-à-vis the costs of pollution and deforestation that it necessarily entails.

### Footnote

- <sup>1</sup> Since data for all parameters were not available separately for Andhra Pradesh and Telangana, the two States have been clubbed together for the purpose of analysis in this article.

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# RAPID STRIDES IN RURAL INFRASTRUCTURE

Dr Amiya Kumar Mohapatra

Adequate and accessible rural infrastructure not only enriches the quality of life, but also raises the efficiency in transportation and lowers down the production cost and directly supports agricultural activities and rural livelihood. Better infrastructure has positive impact on economic development. So the progress of rural infrastructure is the key to rural development. Economics of rural well-being rests on advancement of infrastructure especially on the socio-economic infrastructure which brings qualitative changes in the life of the people. It further amplifies the life of 69 per cent of our Indian rural population.

Inclusive growth is the need of the hour and it ensures economic, social and political equality among all the people of a country. Inclusive growth in itself does not have automatic mechanisms to reach the deprived and hapless section of the society, rather it is the result of focused course of actions of the government. The demographic profile and societal essentials of inclusive growth is skewed towards rural development. If we take holistic overviews of the budgets over the last four years, in terms of its intent and focus, it is found that there is a clear mandate for the uplifting of rural economy especially the rural infrastructure development. The concept of infrastructure is quite pervasive which embraces economic, social and institutional infrastructures. Adequate and accessible rural infrastructure not only enriches the quality of life, but also raises the efficiency in transportation and lowers down the production cost and directly supports agricultural activities and rural livelihood. Better infrastructure has positive impact on economic development. It is found that 1 per cent increase in stock of infrastructure is associated with 1 per cent

increase in gross domestic product (Summers and Heston, 1991) and in particular, the rural sector has a remarkable multiplier effect. So the progress of rural infrastructure is the key to rural development. Economics of rural well-being rests on advancement of infrastructure especially on the socio-economic infrastructure which brings qualitative changes in the life of the people. It further amplifies the life of 69 per cent of our Indian rural population. Considering the above fact, the present government has given enough importance to rural infrastructure development.

## Rural Housing: Pradhan Mantri Awaas Yojana-Gramin

Rural housing has a history of long journey and its first dedicated scheme was introduced in 1996 in the name of “Indira Awaas Yojana (IAY)”, but was re-structured as “Pradhan Mantri Awaas Yojana-Gramin” (PMAY-G) w.e.f. 1<sup>st</sup> April, 2016 due to limited scope of coverage of IAY, even after 20 years of its existence. PMAY-G was launched by the present government as a flagship rural housing scheme which is much wider in its scope and coverage. It targets to provide a pucca house with in-built basic amenities to all the houseless households and households living in kutchha and dilapidated house. The minimum size of the house has been increased to 25 sq. mt (from 20 sq. mt) with a hygienic cooking space. Its motto is to provide “House for All” in the rural areas to 1 crore rural households, within a period of three years-2016 – 2019. Government has made dedicated effort to make 51 lakhs houses in 2017-18 and also in 2018-19 to achieve the target of 1 crore houses. Although, it is a herculean task, but the effort under taken in this direction is well appreciated.

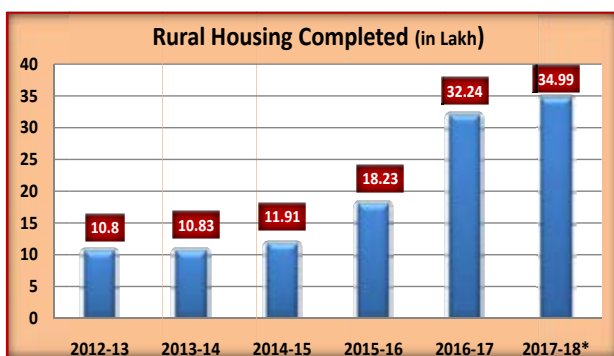


Fig 1:

( Source: Author's Compilation from Budget Documents and Media Reports)

## Rural Roads: Pradhan Mantri Gram Sadak Yojana

Rural road connectivity has been taken care under the “Pradhan Mantri Gram Sadak Yojana” for which Rs. 19,000 crores is allocated in the current budget like the previous year. This is high of all the time and quite huge in comparison with 2012-13 of Rs.8.885 crores and Rs. 9805 crores in 2013-14. This will facilitate village interconnectivity and with urban counterparts as well and hope to foster business and trade among villages and cities and thereby able to contribute to the standards of living of the rural people. Under this scheme, habitations need to be connected with agricultural and rural markets, schools, colleges and hospitals to enhance the quality of life in rural areas.

Based on the data on completed rural roads under PMGSY, it is found that the progress is noteworthy and 82% number of habitations are well connected ( Table-1). Besides, Ministry has approved 18,364 kms for upgradation of roads which is 36.73 % of the target under PMGSY-II during 2013-14 to 31 December 2017.

**Table-1: PMGSY-Road Length in kms and Number of Connected Habitations**

Fiscal Year	Target Length	Completed Length	Connected Habitations
2010-11	34,090	46,784	8,360
2011-12	30,566	31,615	7,666
2012-13	30,000	27,802	9,413
2013-14	26,950	27,330	9,515
2014-15	21,775	38,057	11,121
2015-16	33,649	35,155	9,953
2016-17	48,812	47,447	11,742
2017-18	51,000	28,844	7,082

(Source: Data for 2017-18 upto 13 Feb,2018, PMGSY-OMMAS, MoRD, GoI)

## Agricultural Credit: Budgetary Allocation

Contribution of agriculture to rural employment and rural livelihood itself signifies its national importance. Hence, agricultural

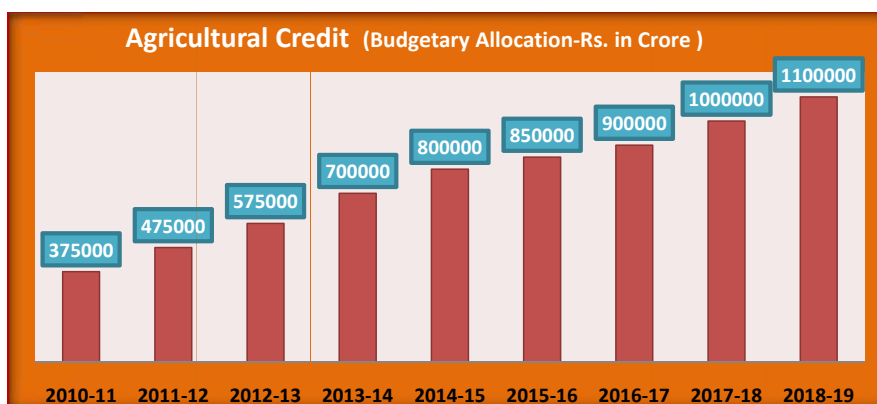


Fig.2:

( Source: Author's Compilation from Budget Documents and Media Reports)

development is imperative for rural development, which can be achieved through sustained credit support facility. The provision of agricultural credit has increased from Rs. 3, 75,000 crores (2010-11) to Rs. 11, 00,000 crores (2018-19), considering the significance of agriculture in contributing in rural employment, farmers' well-being and specially support farmers doubling their income. The growing agricultural credit reflects the endeavour of the present government to uplift the rural economy.

## Sanitation: Swachh Bharat Mission-Gramin

To create awareness and to address the sanitation needs of the people, Swachh Bharat Mission-Gramin was launched on 2<sup>nd</sup> October, 2014 on the occasion of Gandhi Jayanti to achieve “Clean India” by 2019. During the period of 2014-19, the government has proposed to spend Rs.1.34 lakh crore for this mission in the rural area. As a result; 6, 95, 03,071 household toilets got constructed since 2014 and 82.38 % people have their toilets facility in their premises. In addition, 3, 49, 689 villages are declared ODF villages (Open Defecation Free), 371 districts and 16 states are declared as ODF districts and states respectively. Swachh Bharat Mission-Gramin is making significant impact on public health, and helps in safeguarding the self-esteem and security of the masses.

## Rural Electrification: Saubhagya

Electricity connectivity in the villages is essential for the improvement in quality of life. So to achieve the same, ‘Deen Dayal Upadhaya Gram Jyoti Yojana’ was launched. It envisages creation





of basic electricity infrastructure in villages / habitations, to improve quality and reliability of power supply in rural areas. Besides this, last mile connectivity and free electricity connections are also provided to selected BPL households. But later it was found that many households do not have electricity connections for many reasons. So to overcome the challenges and to plug the gap, the present government has implemented one of its flagship scheme called “Pradhan Mantri Sahaj Bijli Har Ghar Yojana (Saubhagya)”. The objective of Saubhagya Scheme is to provide energy access to all by last mile connectivity and electricity connections to all remaining un-electrified households in rural as well as urban areas to achieve universal household electrification in the country and every household got electricity connection by 2018. But it was delayed and will be achieved by the end of 2019. Although the intent is noble, yet the change in deadline poses a challenge to rural electrification. However,

the government has finally strident to achieve 100 per cent rural electrification by 2019.

### Conclusion:

The intent and endeavour of the government is reflected through current budget provisioning to create employment of 321 crore person days, 3.17 lakh kms of rural roads, 51 lakh of new rural houses, 1.88 crore toilets and to provide 1.75 crore new electric connections to households. Planning is fine but it needs to be properly implemented within the given time framework and within the resource constraints to get the desired outcome. Nevertheless, seeing the success story of the present government, we look forward to have more such schemes and positive outcome through effective leadership, good governance, close monitoring, clear cut accountability and timely execution with apt follow up of the various schemes of rural infrastructure development in India.

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### PMGSY well on its way to achieve March 2019 target

Roads are primary to any development agenda. PMGSY, since its inception in 2000, has been able to provide connectivity to 1,52,124 habitations (85.37 per cent against 1,78,184 eligible habitations). Sensing the importance and urgency of rural roads for national development the target date for completion of PMGSY-I has been preponed from 2022 to 2019. Working towards this accelerated target, sanctions have been given to 1,66,012 habitations (93 per cent) against the target of 1,78,184 eligible habitations. PMGSY through its all-weather roads has contributed this key ingredient of development to 11,499 new unconnected habitations for the first time in 2017-18.

Less than 1 per cent eligible habitations remain to be sanctioned for new connectivity under PMGSY, remaining 6 per cent habitations are either not-feasible or sanctioned by the States from their own resources. Connectivity has been provided to 1,52,124 habitations (including 16,380 habitations connected by the States). In addition, 2109 habitations of 100-249 population have been connected. Under the program, 5,50,533 kms of road length has been constructed. The pace of construction of PMGSY roads reached an 8 year high of 134 kms per day in 2017-18 as against an average of 73 kms during the period 2011 to 2014. A total of 48,751 kms of PMGSY roads, connecting 11,499 eligible habitations have been constructed in 2017-18 at an average rate of 134 kms per day.

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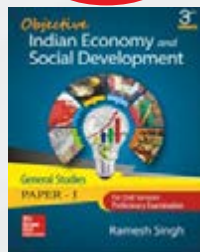
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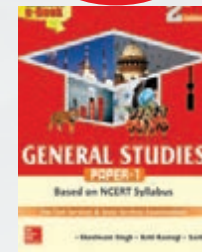
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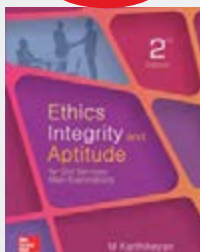
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## NEW VISION FOR AGRICULTURE

Naresh Sirohi

The government has taken a decision to provide minimum support price for all non declared crops of Kharif which will be least one and a half times the production cost. Such declaration is not enough. It is also important to ensure that the crops should also be purchased on declared MSP so that benefits accrue to the farmers. For achieving this it is necessary that if the cost of agricultural products is below the MSP the government should come forward to purchase or initiate such work plans through which MSP can be provided to the farmers.

The government has taken a decision to provide minimum support price for all non declared crops of Kharif which will be least one and a half times the production cost. Such declaration is not enough. It is also important to ensure that the crops should also be purchased on declared MSP so that benefits accrue to the farmers. For achieving this it is necessary that if the cost of agricultural products is below the MSP the government should come forward to purchase or initiate such work plans through which MSP can be provided to the farmers.

The government has completed four years on May 26, 2018. The economic policies of the government have farmer- centric focus. The Prime Minister has been reiterating the commitment made by the government to give high priority to agriculture development, increase in income of farmers and infrastructure development of rural areas and accordingly the policies of the government are made and developed. Keeping in view the interest of farmers more budgetary allocation has been made in the agriculture sector. The increase in the budget of farmers is a ground-breaking step. In the current fiscal, Finance Minister Arun Jaitley has announced that minimum support price (MSP) will be given 1.5 times the cost of various agricultural commodities. By doing so, the government has attempted to fulfil the most important promise made to the farmers.

In the last four years, several farmer friendly schemes have been initiated which include Pradhan Mantri Fasal Bima Yojana (Prime Minister's Crop Insurance Scheme), Mrida Swasthya Card (Soil Health Card), Pradhan Mantri Krishi Sinchai Yojana (Prime Minister Agriculture Irrigation Scheme), Rashtriya Krishi Bazaar (National Agricultural Market), Paramparagat Krishi Vikas Yojana (Traditional Agriculture Development Scheme). However, despite meaningful government schemes and programs, there is no major change in the quality of life of the

farmers. This is mainly due to the requisite support not forthcoming from State Governments as expected and slow response of the official machinery. In fact, it is not easy to set right damage to the system in such a less time. The government is however putting in all out efforts to tighten the nuts and bolts of the system.

I want to share one of my experiences here regarding the flaws of the system. While planning, care should be taken to make the scheme according to the local requirement and participation of the local people is essential in its implementation. It is a challenge for the government to supply water to every farm. But at the local level attempts are being made to fight this challenge. One such example is Mangal Singh, a farmer from Bundelkhand who has invented a turbine. This machine named Mangal Turbine is fabricated in the village. It runs with the aid of flowing stream. Generally in the rural areas where the farmers irrigate fields using diesel or electric pumps, the irrigation by using Mangal turbine is done without consuming diesel or electricity. Drinking water can also be pumped using this turbine. With some modification, the turbine can be used as flour mill, sugar cane crusher, or after adding generator can also be used to make electricity. The use of Mangal turbine saves diesel and electricity besides checking pollution.

Many well-known technical experts and officials of the country have also appreciated this invention for its wide potential. However, due to the lack of adequate state support the patent holder of this turbine is still nowhere. Government should promptly come forward to support and encourage such farmers. Most of the government schemes, which can improve the condition of farmers, are not able to percolate to the ground as they don't get the required push from the official network. The farmer who is neck deep in debt today is forced to sell his



crop below the MSP declared by the government. Farming, which is acquiring the tag of loss-making business, has compelled the farmers' associations to demand for debt waiver and implementation of the recommendations of the National Commission for Farmers (Swaminathan Commission) across the country.

Before evaluating the work done by the government in the agricultural sector, let us have a look at the work done for farmers earlier. Only then will we be able to understand the initiatives taken by the government. In post independence years, the agricultural sector has gone through many transformations. The first period since Independence of India is from 1947 to 1968, in which the expansion of sowing area, increase in irrigation resources and the land reform laws have played a key role. The second period is from 1968 to 1980 which saw use of high yield dwarf varieties, fertilizers, pesticides and new techniques. It is called the period of the evolution of the Green Revolution. The third period is from 1981 to 1991, during which the policy of minimum support price for agricultural products and arrangement of ensured nationwide government procurement and storage and distribution took place. The fourth period is from 1991-1998, which is said to be the period of liberalization, industrialization and the establishment of the World Trade Organization. The fifth period was from 1999 to 2014.

National Commission for Farmers was constituted under the chairmanship of Prof. MS Swaminathan in November 2004 to promote traditional organic farming, development of rural infrastructure, such as road, electricity, education, medical etc. and for removal of the discrepancies in

the agriculture sector. The Commission handed over its fifth and final report to the Central Government on October 4, 2006.

After independence, there is unprecedented development in the agricultural sector. No one can deny this fact. In 1951, the food grain production was 51 million tonnes while today it has reached 277.49 million tonne mark. With foodgrains, there has been record production of fruits, vegetables, milk and fish. There are no two opinions that we have successfully achieved increased production and food security goals. However, despite this tremendous success, due to the agricultural methods adopted, many such problems arose which have brought crisis to agriculture sector and farmers. In addition to agricultural methods, agricultural conditions and policies have not fully supported the farmer. Due to the increase in population, the size of the farmer's holding has reduced. As compared to earlier times, the burden of population dependent on agricultural land has also been more than two and a half times.

As regards policies, the trend of relative prices has not been in favour of farmers. The price of agricultural products has been between 82% and 88% as compared to the price of other products. Due to this disadvantageous price system, farmers have to bear an average loss of 15 percent per annum in comparison to other sections of the economy. The direct result of this is that in almost every seven years the average income of a person engaged in agricultural work has gone down to half of the income of persons engaged in other occupations. Finding solutions of all discrepancies in the agricultural sector is awaited for long. This includes implementation of the comprehensive report of the National Farmers



Commission 1976 and the final report submitted by the National Farmers Commission (Swaminathan Commission) 2004 on October 4, 2006. This report focusing on the causes of the crises faced by the farmers and the suicides committed by them recommend formation of a national policy for them. But unfortunately, till the year 2014, no initiative has been taken to convert these recommendations in to tangible policies and pushing forward their implementation process.

This is the first time when the focus of the Government is on increasing the income of the farmers rather than the production. Consequently, meaningful efforts have been made to convert the recommendations for improving agricultural practices and agricultural conditions into concrete policies.

In fact, many important steps have been taken by the government for improving the condition of agriculture and farmers. Agriculture being the state subject, various schemes of the Centre have yielded different results in different states. In many states, the schemes have yielded positive results and the farmers have been benefited. But due to the indifference of many state governments, the results are not in line with expectations. It is worth noting that the Central Government makes important policy decisions related to agricultural produce, agricultural loans and business. Similarly, Central Government has a major role in obtaining funds for plant protection, biodiversity, food act, farmers' rights act, infrastructure in the villages and mandis and agricultural items. But due to the issue of agricultural being a State subject in the Indian Constitution, the responsibility of implementing all

the laws and schemes is of the State Governments.

Given the challenges faced by agriculture due to globalization, it is necessary to increase the role of the central government in agriculture sector. In view of all these issues, the National Commission for Farmers, in its final report, has recommended to keep agriculture in concurrent list. Considering the crises being faced by the farmers today, there is a need to review the entire process of preparing policies with regard to them.

Prime Minister is determined to actualize the concept of doubling the income of farmers by 2022. To achieve this important objective, a new direction has been given to all three divisions under the Ministry of Agriculture and Farmers' Welfare looking after various schemes, programs and missions. The government has also constituted an inter-ministerial committee for doubling the income of the farmers. In this committee, besides representatives from business and industry, scientists, policy-makers, economists and progressive farmers have also been included. The Prime Minister has said that "I want to double the income of farmers by the year 2022, when India celebrates its 75th anniversary of independence. I have taken it as a challenge, but this is not only a challenge. This goal can be achieved through a good strategy, well planned program, adequate resources and good governance in implementation."

The government has taken a decision to provide minimum support price for all non declared crops of Kharif which will be least one and a half times the production cost. Such declaration is not enough. It is also important to ensure that the crops should also be purchased on declared MSP so that benefits accrue





to the farmers. For achieving this it is necessary that if the cost of agricultural products is below the MSP the government should come forward to purchase or initiate such work plans through which MSP can be provided to the farmers. Niti Aayog will set up such a mechanism in consultation with the central and state governments, so that the farmers get adequate price of their products.

Keeping in mind the C-2 formula of the farmers to fix MSP, a ministerial group has been constituted under the chairmanship of Home Minister Rajnath Singh, which will soon express its views on this subject. In fact, this decision will prove to be a milestone for agriculture sector and farmers. In order to protect the farmers from natural calamities and other losses, old scheme has been modified and given the new name Pradhan Mantri Fasal Bima Yojana (Prime Minister's Crop Insurance Scheme). Premium has been reduced in this scheme and the process of payment of claim has been made easier. Further, the budget of this scheme has been increased by 44.59 percent i.e. from Rs 9000.75 crores to 13014.15 crores in the year 2018-19.

In order to improve the Pradhan Mantri Fasal Bima Yojana, the Comptroller and Auditor General, i.e. CAG's report, should be considered seriously. The CAG report, while focusing on the irregularities and shortcomings in the implementation of crop insurance schemes by the financial institutions, said that farmers lose the claims of insurance due to sheer negligence by the banks. The agencies entrusted with implementation of crop insurance schemes have rejected farmers' claims due to shortcomings in the proposals sent by the banks regarding insurance.

There are instances that banks did not deposit the claims of compensation to the beneficiary's account. That is why the CAG has suggested the government that the statement of account of all these private insurance companies should be made public as they are given huge amounts of funds from public money collected through taxes. Important works like crop cutting and TRS (Timely Recording Scheme) need to be transacted with more timeliness and seriousness in deciding compensation for crop insurance as this work is considered to be very important in terms of agriculture. The damage to the crops is detected by the results of the samples of crop cutting. They also help in assessing the actual condition of production and productivity of main crops.

Under the Pradhan Mantri Krishi Sinchai Yojana 'Water for every farm', there has been an increase in irrigation resources and the land under irrigation has also increased. Work is also progressing at fast pace in micro-irrigation. A special budget has also been allocated for this. So far about 10.48 crore Soil Health Cards have been distributed. However, how many farmers are using nutrients according to this Card, there is no data available in this regard. But 100 percent target of neem-coated urea has been achieved.

On one hand, this has benefitted the farmers who were perturbed due to the shortage of urea while on the other hand, the diversion to the urea industry has stopped and subsidy of government is saved. Through Paramparagat Krishi Vikas Yojana (Traditional Agriculture Development Scheme) native traditional techniques are being promoted. The production and productivity at all levels has been maintained and dependence on chemicals and fertilizers has been reduced. Work has also been started to digitize Land Records and in many states this work has progressed very well. In Telangana, after digitizing the record, work is in progress to link them with Aadhaar. There has also been a big transformation in the field of rural electrification. During the last four years, more than five and a half lakh kilometers of roads have been constructed in the villages of the country, which has resulted in better connectivity to the farmers' market. Obviously, easy access to the mandi and market will give the farmers more benefits for their crops.

In last four years, schemes related to agriculture and farmers can be called a good beginning by the government. During the implementation of the schemes, many practical problems will emerge and there will always be a scope for their improvement, which should also be carried out from time to time. At present, the condition of farmers is not satisfactory and there is a lot to be done for them. The government has the spirit to do earnestly for the farmers. The government has not only devised excellent and concrete policies and programmes in the interests of the farmers, but also made all out efforts to implement them meaningfully. The nation will witness the positive outcome in the days to come.

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# EXTENDING TELECOM CONNECTIVITY TO RURAL INDIA

Archana G. Gulati

For new rural India to benefit from new technologies, robust telecom connectivity is the key. Through its Bharat Net project, the Department of telecommunications is connecting 2.5 lakh village panchayats with Optic Fibre Cable to enable delivery of high speed broadband. Last mile access is envisaged to be provided through wireless connectivity including subsidized Wi-Fi networks. The Department's Universal Service Obligation Fund has several other schemes too to bring better mobile and internet connectivity to rural and remote areas. Keeping in mind the potential of rural markets, private technology giants such as Google and Facebook are keen on rural connectivity projects through unconventional means such as balloons and drones respectively.

Rural India is being viewed the next major potential market for internet broadband enabled services. This presents both an exciting market opportunity for service providers as well as an opportunity for policy makers to help mainstream rural India.

According to a NASSCOM report, India possesses the world's second largest internet user base, after China. This report has made certain projections about the state of internet usage in India by 2020. These include:

- 730 million Internet users in India.
- 75% of new Internet user growth from rural areas.
- 70% of e-Commerce transactions via mobile phones.
- 75% of new Internet users to consume data in local languages.

- India to remain the fastest growing Internet market.

There is a huge potential in rural areas for the usage of internet and emerging internet-based technologies. Rural e-Health, entertainment, e-commerce, e-agriculture and digital financial inclusion will greatly benefit from new technologies such as 5G connectivity, Over the Top (OTT) Services and the Internet of Things (IoT).

## 5G Connectivity:

After the success of 2G, 3G and 4G, next generation 5G rollouts are predicted and targeted around 2020 in India. The government is working on formulating roadmaps and strategies to achieve this objective. 5G connectivity is the focus of interest not only because of the obvious upgrade from 4G speeds, but also because 5G internet access will herald new services by being



the backbone of IoT networks and service. For instance, a 5G network could be used to remotely operate smart devices for healthcare, etc. When it comes to specific rural applications, smart sensors for irrigation and energy management, etc. would greatly benefit the farming population. Those rearing livestock could keep a track on their location via sensors and GPS technology, thus making management of livestock a simpler task. However, 5G technology is yet to truly have a well-defined rollout strategy, and it would take some time before rural India is ready to adopt it. Many areas in rural India are yet to receive basic internet connectivity and thus would need to take one step at a time before they are ready to delve into the world of 5G internet and its applications. Moreover, India is doing well and will need to continue to do well when it comes to providing low-cost smartphones. Without smartphones, users will find it hard to truly make the best use of 5G, and in rural areas, where smartphone access is lower, this is a necessary course of action.

### Over the Top (OTT Services):

Third party applications/services or OTT Services that ride over internet services are a major part of the digital environment today. The most common examples of OTT players are WhatsApp, Paytm, Amazon, Flipkart, Uber, Ola, etc. Applications like Skype have been used to connect teachers to students across various locations, including remote areas. There are a host of other education, financial services and health services/information Apps too. The government's financial inclusion drives (e.g. Jan Dhan Yojana) coupled with the unique national identity system (Aadhaar) and the ubiquity of mobile phones in India have given a big boost to App based payments and financial services for rural India. The RuPay card is one such example. Government services like pension, insurance etc. are being increasingly delivered through local language Apps by the Central and state governments. Further, occupation specific Apps are being used to assist rural Indians. One such App is *Kisan Suvidha*. 'Launched by PM in 2016 to work towards empowerment of farmers and development of villages, the app design is neat and offers a user-friendly interface. It provides information on current weather and also the forecast for the next five days, market prices of commodities/crops in the nearest town,

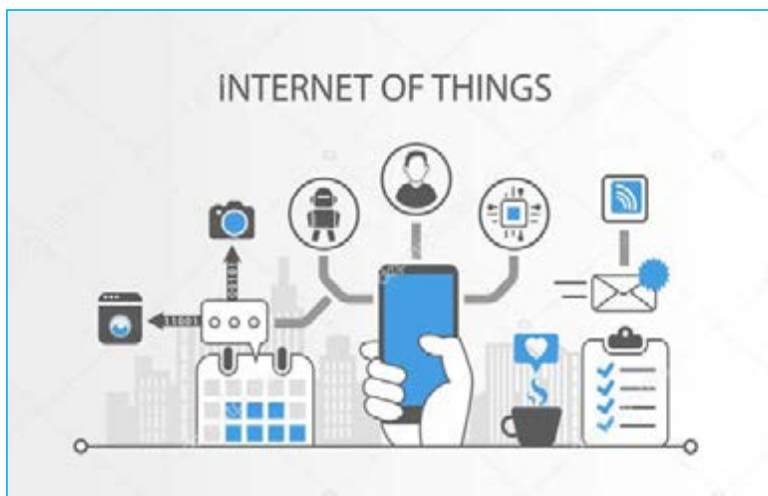
knowledge on fertilizers, seeds, machinery etc. The option to use the app in different languages makes it more widely accessible.<sup>1</sup> Other examples are crop insurance and agri-market Apps<sup>2</sup>. There are innumerable such Apps developed by private sector and NGOs e.g., 'the "SmartGaon is a non-profit app built for the betterment of quality of life of the people living in the rural areas. It is a B2C model where the business is only for the consumer," "The USP of the app is that it covers all the aspects of developing a village, from setting up school infrastructure, digitalization, helping farmers list their produce cutting out the middlemen, to building toilets and setting up CCTV cameras in the village."<sup>3</sup> With the growth in rural mobile coverage and internet penetration and an increase in the smartphone user base, such Apps and services can positively impact rural education, well-being and commerce. Apps like myGov that allow citizens to interface with the Government have a special meaning for rural India and remote parts of the country.

### Internet of Things (IoT):

The Internet of Things enables objects sharing information with other objects/members in the network, recognizing events and changes so to react autonomously in an appropriate manner. The IoT therefore builds on communication between things (machines, buildings, cars, animals etc.) that leads to action and value creation.<sup>4</sup> The applications of IoT in sustainable rural development include:

- **Sustainable Land and Water Resource Management:** This includes an active monitoring system for monitoring the environment as environmental and climate changes can massively impact agriculture. A real time system of monitoring would enable the users to make both short term and long term decisions based on the information. Add to the mix a real time visualization system for the conditions, as well as a decision support mechanism, and you would have a well-rounded tool for managing agriculture and water resources. Pollution levels in water bodies could thus, be tracked and causes could be identified in time.
- **Food Security:** Food security can be monitored via IoT. Through the use of sensors/RFID

etc., every stakeholder in the movement of the food products can view parameters like the lifetime, environment during transportation, shelf life, etc. Fishermen can use data about fish concentrations to make fishing a more efficient activity. Since water scarcity is a major hurdle to food security, automated drip irrigation can make sure that plants are watered in just the right areas and with the exact amount needed, thus preventing wastage.



- **Disaster Management:** Rural areas and livelihoods are often severely affected by disasters like floods, earthquakes, widespread-diseases, etc. IoT systems can be used to predict earthquakes based on microscopic vibrations and help reduce losses in these incidents. Similarly, water supply can be examined to detect disease causing elements at an early stage. Also, IoT devices can be used to predict the occurrence of floods.
- **Public Health:** Certain health conditions often require continuous checkups, which are hard to receive in rural areas. Wearable devices for patients will make it possible for their body conditions to be monitored without physical sessions with a doctor, and the treatment could be routinely adjusted based on the information. Similarly, people suffering from dangerous health conditions could wear a device that could alert emergency services in the event of a sudden or drastic change in health conditions.

### Way Forward:

For new rural India to benefit from new technologies, robust telecom connectivity is the key. This is already an area that the Government is keenly focused upon. Through its Bharat Net project, the Department of telecommunications is connecting 2.5 lakh village panchayats with Optic Fibre Cable to enable delivery of high speed broadband. Last mile access is envisaged to be provided through wireless connectivity including subsidized Wi-Fi networks. The Department's Universal Service Obligation Fund has several other schemes too to bring better mobile and

internet connectivity to rural and remote areas. Keeping in mind the potential of rural markets, private technology giants such as Google and Facebook are keen on rural connectivity projects through unconventional means such as balloons and drones respectively. Low power solutions that use solar energy would complement the smaller cell architecture of 5G networks. Rural content development and ICT literacy are also areas that are attracting attention of both Government and private entities as other essential ingredients of the new technologies eco-system. With the above prerequisites in place, the new and emerging technologies discussed above can greatly contribute to agriculture, rural education, health, entertainment and risk management etc. These technological developments will be helped along by an ever-increasing user base for internet services, as well as for smartphones in rural India, boosting investment and creating a virtuous cycle of ICT enabled rural development.

### Footnote

1. <http://claroenergy.in/top-10-apps-revolutionizing-indian-agriculture/>
2. *ibid*
3. <https://www.financialexpress.com/industry/technology/smart-villages-how-smartgaon-app-is-bringing-bharat-closer-to-india/1103209/>
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# EMPOWERING WOMEN AND CHILDREN IN INDIA

Dr Pawan Kumar Sharma

Ministry of Women and Child Development It has launched and effectively implemented several mammoth initiatives like BBBP, NNM, PMMVY, SABLA-Universal Scheme for Adolescent Girls, OSCs, MPVs, POCSO e-Box, Mahila e-Haat. Apart from these, the Ministry has also expedited the workings of several other schemes such as passage of Maternity Benefit (Amendment) Act, 2016, Draft Anti-Trafficking Bill, Draft National Policy for Women- 2017, Juvenile Justice (Care & Protection of Children) Model Rules, 2016, training of women panchayat heads, Swadhar Greh, Mahila Shakti Kendra. The Ministry has ensured leveraging ICT to ensure transparency and quick delivery of services as well as preventing leakages.

The Union Ministry of Women and Child Development has been diligently working towards the cause it seeks to address. The conscientious initiatives undertaken from the year 2014-15 prove this to be a practice rather than a theory. It has launched and effectively implemented several mammoth initiatives like BBBP, NNM, PMMVY, SABLA-Universal Scheme for Adolescent Girls, OSCs, MPVs, POCSO e-Box, Mahila e-Haat. Apart from these, the Ministry has also expedited the workings of several other schemes such as passage of Maternity Benefit (Amendment) Act, 2016, Draft Anti-Trafficking Bill, Draft National Policy for Women- 2017, Juvenile Justice (Care & Protection of Children) Model Rules, 2016, training of women panchayat heads, Swadhar Greh, Mahila Shakti Kendra. Honest measures for promoting safety of women and children have been undertaken. The Ministry has ensured leveraging ICT to ensure transparency and quick delivery of services as well as preventing leakages. Media, in all its forms, has been put to its best use to generate awareness, indicating tremendous strides.

## Landmark Schemes for Women and Children:

**Beti Bachao Beti Padhao (BBBP)**, the flagship scheme was launched initially to address the declining Child Sex Ratio, as it graduated, it broadened and took under its ambit other concerns such as strict enforcement of PC&PNDT Act, provisions to motivate higher education for girls and related issues of disempowerment of women on a life-cycle continuum. Since its inception in 2015, it has been independently growing widely in local domains as well.

As per preliminary reports for 100 BBMP districts between April-March 2014-15 & 2015-16, a 58% increase in Sex Ratio at Birth (SRB), 69 districts reported progress in the first trimester registration against the reported *antenatal* registrations, and status of institutional deliveries improved in 80 districts in comparison to previous years.

During the last 3 years, encouraging trends in the SRB of 104 districts are visible as per the

latest Health Management Information System data for 161 BBBP districts between April-March, 2015-16 & 2016-17. 119 districts have reported progress in first trimester registration against the reported ANC care registrations and 146 districts have reported improvement in institutional deliveries. In addition, as per Unified District Information System for Education 2015-16, the girl's enrolment in secondary education has increased to 80.97% against 76% in 2013-14.



All India expansion of BBBP to cover all 640 districts was launched by the Prime Minister on 08.03.2018 for deeper positive impact on CSR with an outlay of Rs. 1133 crore during 2017-18 to 2019-20 which will include multi-sectoral intervention in 244 districts in addition to existing 161, where physical implementation of the scheme will happen while 235 districts, will be covered through Alert District Media, Advocacy and Outreach.

To deal with the problem of malnutrition, government has set-up the **National Nutrition Mission (NNM)** with a budget of Rs. 9046 Cr. The aim is to achieve an improvement in the nutritional status of children of 0-6 years and pregnant and lactating women in a time bound manner, during the coming three years beginning 2017-18, with defined targets. Some of them are to prevent and reduce stunting in children (0-6 years) by 6% @ 2% p.a., prevent and reduce under nutrition in children (0-6 years) by 6% @ 2% p.a., reduce the prevalence of Anaemia among young children (6-59 months) by 9% @ 3% p.a.; reduce the prevalence of Anaemia among women and adolescent girls in the age group of 15-49 years by 9% @ 3% p.a.; reduce low birth weight by 6% @ 2% p.a. The project has emanated through Information and Communication Technology enabled real-time-monitoring (ICT-RTM) of ICDS with customized mobile based application software (ICDS-CAS). A total of 70,000+ Smart Phone devices pre-installed with ICDS-CAS software application have been provided to roll-out ICT-RTM in six states with 70,299 trained Anganwadi Workers as volunteers to help people in their application.

The **Pradhan Mantri Matru Vandana Yojana (PMMVY)** is a maternity benefit programme that

has been made a pan-India phenomenon since 31<sup>st</sup> December, 2016. The beneficiaries would receive cash incentive of Rs 6000/- during pregnancy and after institutional delivery. The scheme implementation guidelines, the software for its roll out i.e. PMMVY-CAS and its user manual were launched on 01.09.2017. Under PMMVY, Rs. 2016.37 crores to all 36 States / UTs had been sanctioned during 2017-18 with a release of Rs. 1991.72 crores.

In 2017, government notified **Supplementary Nutrition (ICDS) Rules, 2017** to regulate entitlement of 'nutrient dense food' for every pregnant and lactating woman till 6 months after child birth, and every child in the age group of 6 months to 6 years for 300 days in a year.

**SABLA** is a Centrally- sponsored scheme for **Adolescent Girls**, to enable them for self-development and empowerment, improve their health and nutrition status, promoting awareness about health, hygiene, nutrition, adolescent reproductive and sexual health, family and child care and facilitating access to public services through various interventions such as guidance & counselling and imparting vocational training for girls aged 16 and above. During 2015-16, Rs. 47040.57 lakhs were released, Rs. 49479.06 lakhs utilized and 110.03 lakhs nutrition beneficiaries covered and in 2016-17 Rs. 39516.75 lakhs were released, Rs. 13870.90 lakhs utilized and 54.50 lakhs nutrition beneficiaries covered under SABLA scheme. Now, in 2017-18, the scheme stands extended to additional 303 districts in addition to existing 205 districts for further outreach.

In 2015, **Swadhar Greh** scheme was launched

to cater to primary needs of women in difficult circumstances. Setting up of shelter, food, clothing, medical treatment and care are exclusively provided, meanwhile, they are provided with legal guidance to enable their readjustment in family/ society. Rehabilitation for their emotional and economic state is rendered to enable them to start life afresh. Presently, 561 Swadhar





Greh are functioning in the country benefiting 17,291 women. In addition, **one widow home with 1000 inmates capacity**, has been constructed at Sunrakh Bangar, Vrindavan.

**Mahila Shakti Kendra** scheme was launched in 2017 to address women's issues at the rural level wherein over 3 lakh student volunteers would be engaged in 115 most backward districts for three years. These volunteers, mobilised from local colleges, NCC, NSS, NYK etc, will work with local women to help them access government schemes for their benefit and to provide 'one stop convergent support services for their skill development, employment, digital literacy, health and nutrition.

**Mahila Police Volunteers (MPVs)** will prove to be an effective alternative against the local police for women. MPVs were launched in all States and UTs to serve as a public-police interface and facilitate women in distress. The MPVs report incidences of domestic violence, child marriage, dowry harassment and violence faced by women in public spaces. Initiated in 2016, the MPVs is operational in 5 States.

**Mahila e-Haat** is an initiative to economically empower women through financial inclusion. The government launched a bilingual portal Mahila e-Haat, a direct online digital marketing platform for women entrepreneurs/SHGs/NGOs in March 2016. It received over 14.50 lakh visitors. Women entrepreneurs / SHGs / NGOs from 22 states showcased approximately 1800 products / services. It has 23000 registered SHGs with 3 lakh beneficiaries. In 6 months, women entrepreneurs / SHGs / NGOs have transacted business of over Rs. 20 lakh.

**Passport rules have been amended** in favour of single mothers. Now either mother or father's name can be provided in application form and applicants do not have to provide any certificate of marriage / divorce during the application.

In May 2016, **Training for Women Heads of Panchayats**, as an initiative was implemented at Jhalawar, Rajasthan where more than 40 elected women representatives participated in the workshop aiming at empowering and developing their capacities.

Apart from these developmental schemes for woman and child, the Government has also undertaken commendable measures to ensure safety of women and children in public spaces. The Ministry has launched the Scheme of **One Stop Centres** to facilitate access to an integrated range of services

including medical assistance, police assistance, legal aid/counseling and psychological- social/counseling, shelter. For girls under 18 years of age, institutions established under the Juvenile Justice (Care and Protection of children) Act, 2000 and Protection of Children from Sexual Offence Act, 2012 will provide guidance.

During the year 2015-16, a major thrust was on the setting of these centres for which funds were sanctioned to 33 States / UTs for establishment of OSCs, and as a result, 51 OSCs became operational with an initial outlay of Rs. 18.58 Cr. As of date, 170 centres have already been established and provided support to 1 lakh women. The government has planned to set up one centre per district by the end of 2018-19.

In 2016, the **Universalisation of Women Helpline** was launched to provide 24 hours immediate and emergency response to women affected by violence through referral (such as police, One Stop Centre, hospitals) and also provide information of women related government schemes through a uniform number with short code 181 to all States/UTs. By end of 2016, Women Helplines were operational in 18 States/UTs. During 2017, 10 new **women helplines** were started taking total coverage now in 28 States, and over 11 lakh calls of women were handled in 2017. To improve overall responsiveness to gender sensitive cases and to bring visibility and strengthen gender sensitivity in police force, an advisory has been issued to all States to increase **women representation in police up to 33%**.

To enhance the **safety and security for women**, **Nirbhaya Fund** has been set up with a corpus of Rs. 2000 Cr to implement initiatives. Under this, 13 proposals have been appraised and recommended for Rs. 2177.27 Cr, a focused **project for women's safety in 8 prominent cities** is being prepared, project for **Integrated Emergency Response Management** operated by Railways, CCTVs and monitoring rooms are being installed at 983 major stations to provide 24x7 security to women at stations and in trains. **New Taxi Policy Guidelines** have been put in place with much improved safety measures for women, a **Public Grievance Cell** is also active in the Ministry giving women and children citizens a way to send grievances directly which has already processed 18,000 complaints in one year since its inception. Apart from this, a robust online MIS has been developed to track implementation of all the projects under Nirbhaya. The 'Panic Button and Global



Positioning System in Mobile Phone Handsets Rules 2016' have been notified and roll-out in the offing.

**Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act 2013, has seen massive improvement in the recent years** after ensuring the establishment of Internal Complaints Committees in all Ministries / Departments of Government. To help women report incidents of **Sexual harassment at the workplace**, an online complaint mechanism, **SHe-Box** has been established. Any female employee in the country, whether employed by the government or private, can file an online complaint of sexual harassment through this portal.

The **Gender Champion Initiative** has been operationalized for sensitizing young students to create awareness on laws, legislations, legal rights and life skills education through 100 Universities and 145 colleges.

**Railway Childline** is implemented by Railways for runaway, abandoned, kidnapped, trafficked children. Child Helpline Centres were initially set up at 20 major Railway Stations for rehabilitation and rescue of such children. Additional 15 stations have been approved this year for providing similar facilities. Awareness campaign via posters, cautioning the passengers about the children around them who may need protection, in railway coaches was launched in November, 2015. Two lakh posters were released and distributed in trains in 2015-16.

In a first of its kind, **Kiosks with Child Helpline** have been set up at key 24 railway stations where the identified children are brought for temporary stay before they are restored to their parents or are sent to a children's home. Continuous announcements are made for passengers to keep a look-out for such children. Such assistance has been provided to more than 11,000 children till date.

**POCSO e-Box** was launched in August 2016 and is a simple and easy to use facility for children or any adult to register complaints of child sexual abuse or harassment. It is a direct online reporting mechanism where each complaint is handled with sensitivity and anonymity to provide optimum protection. Apart from this, the government recognized the need to place **cradle locations** in hospitals, PHC, etc to save the lives of unwanted new born babies and placing them in the adoption net managed by CARA with the intent to rehabilitate them in familial care. In an unprecedented initiative for working women, **maternity leave has been extended to a period of 26 weeks.**

The government launched a web portal called **Khoya-Paya** for reporting missing children. During 2016, with more than 7400 registered users and nearly 6800 cases of missing / sighted children, nearly 2500 cases were closed on the portal. The portal has now been integrated with Trackchild.

The 'Support to Training and Employment Programme for Women Scheme', in operation since 1986-87 to provide skills giving employability to women making them self-reliant, set up an ambitious plan to train 500 million women by 2022 has been discontinued.

In addition to conferring **Nari Shakti Puruskar** on eminent women, organisations and institutions rendering distinguished service to women's cause especially belonging to the vulnerable and marginalized sections of the society, 'First Ladies' who have broken the glass ceiling and ventured into unusual fields, like the first female Merchant Navy Captain, first train driver of passenger train, first female fire fighter, first female bus driver, first Indian woman to reach Antarctica among others are being recognized.

The **National Policy for Women, 2017** was drafted and is currently under consideration. The Policy has been prepared keeping in view the socio-economic changes that have occurred since the last policy of 2001. Over 15,000 crowd-sourced ideas have been considered as part of the policy formulation process.

Indian women, who have to stay away from their families for job purpose or do not have anyone to house them, often suffer from insecurities related to safety. Under **Working Women Hostel** Scheme 33 new hostels were sanctioned during last 3 years to meet the housing requirements of working or helpless women. Revised guidelines 2015 provide to install CCTV cameras in these Hostels and 7.5% seats are reserved ST community women.

These and many other initiatives by the Ministry of Women and Child Development, ensure a real time empowerment of the women and children in our country and thus, very significantly, paves way for a better society. However, there is a strong need to bring women working as domestic help in metropolis under any of these schemes.

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## INDIA MAKES STRIDES TO TACKLE CLIMATE CHANGE

Dr Dhurjati Mukherjee

Facing the grave challenges of climate change India has taken some definite strides in two fields—the Swachh Bharat campaign and the pursuit of renewable sources of energy, especially solar power. On both fronts, the country has been quite successful and there has been commendable progress. In fact, toilets are being built all over the country with government assistance with the objective of making the country defecation free by the year 2019. The pace of activity in the solar power sector has picked tremendously in the last two years due to strong government support and increasing price competitiveness of solar power.

Facing the grave challenges of climate change, India has taken some definite strides in two fields—the Swachh Bharat campaign and the pursuit of renewable sources of energy, especially solar power. On both fronts, the country has been quite successful and there has been commendable progress. In fact, toilets are being built all over the country with government assistance with the objective of making the country defecation free by the year 2019. The pace of activity in the solar power sector has picked tremendously in the last two years due to strong government support and increasing price competitiveness of solar power.

There is a hue and cry over natural resources of the earth being mindlessly exploited globally, resulting in a poor state of their regeneration and causing irreversible damage to the planet. Every year, the World Environment Day is observed with great fanfare but in reality whatever is being done by most countries is not sufficient to restrict global warming to save mother earth.

One cannot deny the fact that climate change and global warming has become a problem and at the end of the last five-six years, it is declared the warmest year. This is expected to continue as experts believe that the declarations by individual countries as per the Paris Accord, even if implemented in letter and spirit, may result in global warming increasing between 2°C to 3°C, if not more.

Coming to India, the environment is being threatened as ecological disruptions are taking place in various ways. The November 2015 report of the World Bank found that climate change could effectively negate economic progress, pushing 45 million Indians into extreme poverty over the next 15 years. Other reports point out that India lost more people to the impacts of climate change than any other country and suffered third highest financial losses from extreme weather events as per a report on global climate vulnerability released on November 9, 2017. The Global Climate Risk Index 2018 referred

to India's intense heat waves, extreme rainfall events and severe floods to label the country as the sixth most vulnerable in 2016 after Haiti, Zimbabwe, Fiji, Sri Lanka and Vietnam.

The report, prepared by German Watch and other organizations from across the world, found climate change impacts had killed 2119 people in India during 2016, a number higher than any other country. However, analysts believe that India's actual vulnerability may be even higher than assigned because the effects of long-term climate impacts such as sea level rise which, in the country, affects regions like the Sunderbans with a population of five million had not been considered in assessing the climate risk. It estimated that India lost about \$ 21,500 million due to extreme weather events during 2016, the third highest financial loss after those suffered by China and the US.

Again, India is set to overtake China and become the world's largest emitter of sulphur dioxide, an air pollutant that is generated when coal is burnt and can lead to severe haze, acid rain and asthma complications. A US study (released on November 9 last year) found that though China's sulphur dioxide emissions have fallen by 75 per cent since 2007, India's emissions increased by 50 per cent. The findings, based on measurements by an instrument on NASA's Aura satellite, point to "effective sulphur dioxide control in China and lack thereof in India", the researchers pointed out in the journal, Scientific Reports. The number of Indians exposed to dangerous levels of



the pollutant increased from 13 million in 2013 to 33 million in 2016. China's share of such population dropped from 457 million to 99 million over the same period.

All this clearly point to the fact that there is an ecological crisis in the country that needs to be tackled effectively. Though one cannot deny the fact that environmental awareness has been growing, the dimension of the looming crisis has surely threatened our ecological system.

Estimates reveal that India needs over \$1 trillion to meet its requirements to counter climate change and would like to have a meaningful resolution of the issue of long-term finance at the global climate negotiations. It is estimated that India needed \$ 206 billion to support plans to curb emissions, \$ 189 billion to execute national and state level climate action plans and \$ 134 billion for low carbon growth related mitigation.

It goes without saying that we are on the brink of the worst impacts of climate change. However, it may be pointed out that experts and even the UN Secretary General, Antonio Guterres has expressed optimism about the start on decoupling emissions from economic growth and massive economies such as China and India are on track to surpass their Paris pledges. But experts have been questioning whether the steps taken are adequate to tackle the looming crisis ahead.

All the above developments confirm that the so-called modern civilization is destroying the tropical forests, hastening land degradation and desertification, destroying the environment, destroying livelihoods of poor farmers and turning human lives into well trained slaves, specially in Third World countries, including India. Moreover, a latest report of the

Southern University of Science & Technology in China has pointed out that even if global warming is limited to 2°C, as per the Paris Accord, around 25 per cent or even more of the total land surface will become drier. And this includes land in all five climatic zones – hyper arid, arid, semi arid, dry sub-humid and humid.

### India's Initiatives

Gandhiji had the foresight to recognize the imminent danger threatening the existence the Earth as a result of environmental destruction and violence and references are found in his famous book, Hind Swaraj. He predicted "We all have to die with it (modern civilization), if we do not act, that is, if we don't do our duty".

In such a critical situation, India has taken some definite strides in two fields –the Swachh Bharat campaign and the pursuit of renewable sources of energy, specially solar power. On both fronts, the country has been quite successful and there has been commendable progress. In fact, toilets are being built all over the country with government assistance with the objective of making the country defecation free by the year 2019. Certain sections believe that this may take another year or so to achieve the objective and, within this time frame, the habits of people are also expected to change.

Also, as stated by the Union Water Resources Minister Shri Nitin Gadkari, the result of Ganga cleaning would be visible on the ground by March next year as water quality would be 70 to 80 per cent cleaner from 2014-15 levels. "It is a general perception that nothing significant is being done under 'Namami Gange' programme but this is not correct. Our works have started results on the ground", Shri Gadkari said. A total of 195 projects worth Rs 20,959 crores have been sanctioned under the programme which is being





implemented by the National Mission for Clean Ganga (NMCG) in association with the states.

The water resources secretary of U.P. confirmed that water quality of the river has improved in terms of three parameters – biochemical oxygen demand (BOD), dissolved oxygen (DO) and coliforms which indicate the health of the river. The DO levels have improved at 33 locations and BOD levels at 26 locations while coliform bacteria count is reduced at 30 locations, while referring to water quality monitoring data of Central Pollution Control Board (CPCB) for 2015-17 period.

As regards the power sector, the Prime Minister Shri Narendra Modi wants to raise renewable capacity to 175 gigawatts by 2022 from 45 gigawatts at present. In addition to meeting its own energy targets, which Bloomberg New Energy Finance estimates may cost \$200 billion. India wants to emulate industrial development in neighbouring China, where solar manufacturing has created a world-leading export industry.

Meanwhile India has become one of the biggest clients of Chinese photo-voltaic manufacturers in the absence of its own domestic capacity. But this is expected to change as our country has the necessary skills and along with finance, being provided by the government, future prospects appear quite bright. Moreover the switch to renewable sources of energy should create more and more demand for photo-voltaic products, not just in India but also in the neighbouring countries.

Reports indicate that installed solar capacity, including rooftop and off-grid segments, in the country has crossed 10 gigawatts (GW). In fact, the pace of activity in the sector has picked tremendously in the last two years due to strong government support and increasing price competitiveness of solar power. "India is expected to become the world's third biggest solar market from next year after China and the US", according to consultancy firm, Bridge to India stated.

This was a dramatic increase from the 20,000 MW envisaged in the Jawaharlal Nehru National Solar Mission launched in the year 2010. The present stress on solar power at the behest of none other than the Prime Minister himself is indeed a strategic tool for the government under its changed attitude after the Paris Accord.

India receives about 5000 trillion kilowatt hours (kWh) equivalent of energy per year through solar radiation. Just one per cent of the country's land area can meet its entire electricity requirement till 2030.

Experts believe that solar power is one way of meeting India's shortfall and increasing energy requirements in the coming years. It is indeed regrettable that nearly 400 million people in the country do not have access to electricity but less than 6000 solar lanterns are used to day.

In a survey undertaken by McKinsey & Company (in May 2009), it was pointed out that India has one of the world's highest solar intensities with an annual solar energy yield of 1700 to 1900 kilowatt hours per kilowatt peak (kWh/KWp) of the installed capacity. After India, US mainly California state, Hawaii and Spain are the largest solar power producers with 1500 to 1600 kWh/KWp followed by Italy, Australia, China, Japan and Germany. It may also be heartening to note that as per Ernst & Young's renewable energy country attractiveness indices which ranks countries based on regulatory environment, fiscal support, unexploited resources, suitability to different technologies and other factors determining renewable energy growth in a country, India attains a ranking within the top five in the world.

### Future Outlook

Afforestation, desiltation of rivers and canals and replenishment of soil with organic matter – will need maximum resources that now flow to power, large industry and irrigation. The present thrust on solar power and wind power are, no doubt, steps in the right direction but this has been very late in the day. As it is quite obvious, "afforestation can be successful only if, for a few decades, the forests are freed from the pressure of firewood and dams and other development do not replace these forests, causing extermination of wild life". This is the price we have to pay for the destruction we have carried out in the name of development.

Finally, it needs to be reiterated that at this juncture a civilization that is ecologically balanced has to be the strategy of all countries, including India. Humans have to learn to care about what happens to other species and ecosystems that is, to treat nature as if it mattered. What is more important at this juncture is that humans can no longer treat the environment and other species as mere objects but take care of them for their own well being.

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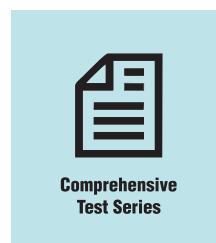
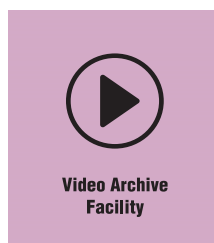
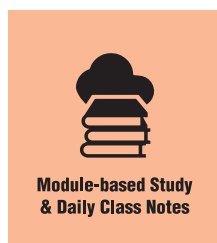
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# ACCELERATING UNIVERSAL HEALTH COVERAGE

Dr Shashi Rani

Government has announced two important interventions to provide health to all at their door step. First, is through creation of Health and Wellness Centres (H&WC) that “will bring healthcare system closer to the homes of people” and second “a flagship National Health Protection Scheme(NHPS) to cover over 10 crore poor and vulnerable families providing coverage up to five lakh rupees per family per year for secondary and tertiary care hospitalization”

One of the important objectives of National Health Policy 2017 is to reinforce trust in public healthcare system and influence operation and growth of private healthcare industry as well as medical technologies in alignment with public health goals. As per Census 2011, the majority of population lives in rural area, and primary health care is essential health care which should be available and accessible to all equally without any regional and geographical discrimination. Right to Health is a basic human right which is protected by Article 21 of the Constitution of India. Thus, primary responsibility of the Government is to create good quality health care systems which take & care of overall well-being of the people especially marginalized and poor regardless of their socio-economic background and paying capacity.

The Government of India in order to lay down the road map to provide preventive and promotive health care services and universal access to good quality health care presented the new National Health Policy(NHP), in March 2017. The primary aim of the National Health Policy, 2017, is to inform, clarify, strengthen and prioritize the role of the Government in shaping health service systems in all its dimensions such as investment in health, organization and financing of healthcare services, prevention of diseases and promotion of good health through cross sectoral action, access to technologies, developing human resources, encouraging medical pluralism, building the knowledge base required for better health, financial protection strategies and regulation and progressive assurance for health. The policy emphasizes reorienting and strengthening the Public Health Institutions across the country, so as to provide universal access to free drugs, diagnostics and other essential healthcare. Some of the important features related to primary health care towards the Universal Health Coverage are:

- The Policy seeks to reach everyone in a comprehensive integrated way to move towards wellness. It aims at achieving universal health coverage and delivering quality health care services to all at an affordable cost.
- This Policy looks at problems and solutions holistically with private sector as strategic partners. It seeks to promote quality of care, focus is on emerging diseases and investment in promotive and preventive health care. The Policy recommends prioritizing the role of the Government in shaping health service systems in all its dimensions. The roadmap of the new NHP is predicated on public spending and provisioning of a public healthcare system that is comprehensive, integrated and accessible to all.
- The NHP, 2017 advocates a positive and proactive engagement with the private sector for critical gap filling towards achieving national goals. It envisages private sector collaboration for strategic purchasing, capacity building, skill development programmes, awareness generation, developing sustainable networks for community to strengthen mental health services, and disaster management. The policy also advocates financial and non-incentives for encouraging the private sector participation.
- The policy proposes raising public health expenditure to 2.5% of the GDP in a time bound manner. It also envisages providing larger package of assured comprehensive primary health care through the Health and Wellness Centers'. It denotes important change from very selective to comprehensive primary health care package which includes geriatric health care, palliative care and rehabilitative care services. The policy assigns specific quantitative targets aimed at reduction



of disease prevalence/incidence, for health status and programme impact, health system performance and system strengthening. It seeks to strengthen the health, surveillance system and establish registries for diseases of public health importance, by 2020. It also seeks to align other policies for medical devices and equipment with public health goals.

- The broad principles of the NHP is centered on Professionalism, Integrity and Ethics, Equity, Affordability, Universality, Patient Centered & Quality of Care, Accountability and pluralism. It emphasized to ensure improved access and affordability of quality secondary and tertiary care services through a combination of public hospitals and strategic purchasing in healthcare deficit areas from accredited non-governmental healthcare providers, achieve significant reduction in out of pocket expenditure due to healthcare costs, reinforce trust in public healthcare system and influence operation and growth of private healthcare industry as well as medical technologies in alignment with public health goals.
- In order to leverage the pluralistic health care legacy, the policy recommends mainstreaming the Ayurveda, Yoga, Unani, Siddha and Homeopathy (AYUSH). Yoga would also be introduced much more widely in school and work places as part of promotion of good health. The policy supports voluntary service in rural and under-served areas on pro-bono basis by recognized healthcare professionals under a 'giving back to society' initiative.

- The policy advocates extensive deployment of digital tools for improving the efficiency and outcome of the healthcare system and proposes establishment of National Digital Health Authority (NDHA) to regulate, develop and deploy digital health across the continuum of care.

In order to attain these objectives, the country is aiming to create a vast network of public health system based on Public Private Partnership(PPP). In the Union Budget 2018-19, Government has announced two important interventions to provide health to all at their door step. First, is through creation of Health and Wellness Centres (H&WC) that “will bring healthcare system closer to the homes of people” and second “a flagship National Health Protection Scheme (NHPS) to cover over 10 crore poor and vulnerable families providing coverage up to five lakh rupees per family per year for secondary and tertiary care hospitalization” (PIB 2018).

To start with under the “Auyshman Bharat” programme the Prime Minister of India inaugurated first Health and Wellness Centre in Bijapur district of Chattisgarh on 14th April 2018. Under Auyshman Bharat programme it is planned to open such health and wellness centre in 115 Districts across the country. These districts will be those which are historically neglected and having worst health indicators. Also to motivate the state government these districts are not labeled as backward districts rather they will be known as “Aspirational” districts. The present government made target to have such 115 Health and Wellness Centre by

2022. These H&WC will provide treatment for non-communicable diseases, and disburse primary care to young mothers and children. Also it is decided to provide free essential drugs and diagnostic services and expected to provide comprehensive health care services through middle level skilled health professionals along with consultation with doctors of higher level. It is also aimed to deal with public health



issues and to work for preventive, promotive, curative and rehabilitative services for range of medical conditions/ailments. These medical conditions/ailments are; hypertension, diabetes, obstructive and respiratory diseases, oral, cervical and breast cancer, ENT, Ophthalmology. Also oral health, mental health, elderly care and emergency services will be provided at these centres. The provision of yoga services is also covered under this scheme, the space will be created for people to come and learn yoga practice under the guidance of learned instructors. As these centres will be functioning at the level of Sub Centre under Primary Health Centre continuous consultation with doctors is required to discuss individual cases (PIB 2018).

The Second announcement was to launch a “flagship National Health Protection Scheme to cover over 10 crore poor and vulnerable families providing coverage up to 5 lakh rupees per family per year for secondary and tertiary care hospitalization”. This initiative announced as important step towards “universal health coverage”. The scheme will be provided to most socially and economically deprived people. A national health agency will be instituted under the scheme to oversee its implementation at the state-level. The identification of beneficiaries is to be done by consulting the 2011 round of the socio-economic caste census. In 2016, India had similar scheme Rashtriya Swasthya Bima Yojana (RSBY), which was covering an insurance of Rs.30,000 for a family comprising of at most five members. Out of the total expenditure for the scheme in the budget, the Central government pays 75% of the expense, while the rest is borne by the States. The RSBY, targeted at Below Poverty Line (BPL) families, and has been implemented in 15 States in India. Now under NHPS it is planned to cover over 10 crore poor and vulnerable families providing coverage up to 5 lakh rupees per family per year for secondary and tertiary care hospitalization(PIB 2018). The financial protection under this scheme is much broader than the earlier scheme which will provide coverage in case of hospitalization. The expenditure will be shared by Both 60% by the Center and 40% by the State and in North East Region it will be 90% by the Center and 10% by the State.

### **Rural Health Care: Services and Challenges**

As per Census 2011, the total population of India is 121 crore, out of which the rural population

is 83.3 crore (68.84%) and urban population is 37.7 crore (31.16%). It is evident that majority of population lives in rural areas. In context of rural health services, the challenge of government health care system is that there are many gaps in primary health services and the health care facilities are mainly urban centric. The differences in health status in urban and rural areas are based on various factors such as: availability, accessibility and affordability of health services, literacy and educational status, poverty, employment and source of livelihood, income and family size, food intake and nutritional status, gender disparity, housing, access to clean water and sanitation facilities, information and knowledge for health programmes etc. These factors have direct impact on health status of the rural population.

As far as health status of women and children on important indicators are concerned rural population is having greater need of health care services. As per the National Family Health Survey (NFHS) - 4 data, Infant Mortality Rate(IMR) deaths per 1,000 live births is 29 for urban areas and 46 for rural areas. Under five Mortality shows that in urban areas it is 34 deaths per 1,000 live births but in rural areas it is 56 deaths per 1, 000 live births. In case of trends in at least 4 antenatal care visits made by women of urban and rural areas in India, NFHS -4 data shows that in urban areas it is 66 % whereas, in rural areas it is 45% of last births in the past five years. If we look at institutional birth situation in urban areas it is 89% while in rural areas it is 75% . The data shows that there is increase in immunization trends from NFHS 3 stage to NFHS 4 stage but urban and rural divide is visible in Immunization trends. In urban areas it is noted upto 64% but in rural area it is 61 % as against to 62 % of the total status of India. This indicates to put more efforts to approach rural population in more strategic way. The data shows that children under 5 years who are underweight 29 % are in urban and 38% are in rural area, Men and Women who have comprehensive knowledge of HIV/AIDS 37 % in urban and 29% in rural and 28 % in urban and 17 % in rural area respectively. The Households using improved sanitation facility is 70.3% in urban areas in comparison to 36.7% in rural areas. A very important factor for good health is clean fuel for cooking, data shows Households using it is 80.6% in urban areas and only 24 % in rural areas( NFHS-4).

India doesn't have enough hospitals, doctors, nurses and health workers, and since health is a state subject, disparities and inequities in the quality of care and access to health varies widely not just between states but also between urban and rural areas. The WHO report, published in 2016, stated 31.4% of those calling themselves allopathic doctors were educated only up to Class 12 and 57.3% doctors did not have a medical qualification. "The lack of medical qualifications was particularly high in rural areas. The report brought out that whereas 58% of the doctors in urban areas had a medical degree, only 19% of those in rural areas had such a qualification. Strengthening primary healthcare hasn't got the priority it needs and the patient use to reach hospitals after faith-healers, quacks and other unqualified practitioners fail to cure them. Setting up a building and buying equipment is not enough, you need trained doctors to provide care (Sharma S. 2017).

The data provided by Rural Health Statistics (RHS) as on 31st March, 2017, revealed that there were 156231 Sub Centres (SCs), 25650 Primary Health Centres (PHCs) and 5624 Community Health Centres (CHCs) functioning in the country. While the Sub Centres, PHCs and CHCs have increased in number in 2016- 17, the current numbers are not sufficient to meet their population norm. The overall shortfall in the posts of HW(F) / ANM at SCs & PHCs was 5.6% of the total requirement, mainly due to shortfall in the States of Karnataka (4588), Tamil Nadu (2117), Gujarat (1615), Himachal Pradesh (835), Rajasthan (274), Tripura (360) Maharashtra (259) and Goa (43). Shortfall of allopathic doctors in PHCs was 11.8% of the total requirement for existing infrastructure. There was huge shortfall of surgeons (86.5%), obstetricians & gynaecologists (74.1%), physicians (84.6%) and paediatricians (81%). Overall, there was a shortfall of 81.6% specialists at the CHCs vis-a-vis the requirement for existing CHCs. While number of Sub Centres, PHCs and CHCs has increased during the year 2016- 17, the number of overall specialists at CHCs declined, though marginally from the position in 2015-16. Regarding the specialist doctors at CHCs, the number has

been decreased marginally from 4192 in 2016 to 4151 in 2017. Major reduction has been noticed in the States of Madhya Pradesh (109), Gujarat (56), Jharkhand (47), Odisha (36) and Telangana (22).

The study conducted by Hazarika I.(2013) revealed that, while production of health workers has greatly expanded over the years at the cost of increased privatization of medical education in India. The rapid growth in the production of health workers such as doctors, dentists, nurses and midwives has not helped fill vacant positions in the public-health system. Further, the problems of imbalances in the distribution of these health personnel persist, with certain states remaining at a disadvantage. It revealed that mere increase in production capacity is unlikely to resolve the issues related to health-worker availability or distribution.

Golder S. (2017) on Universal Health Coverage stated that majority of Indian population lives in rural areas and only about 26 % doctors serve in this area. Also out of these majority are in the private sector, and it is beyond the reach of a large proportion of the population. "Bringing qualified health workers to rural, remote, and underserved areas is a daunting task. Huge level of international migration of qualified allopathic doctors and nurses further exacerbates the situation".

The study conducted on Rashtriya Swasthya Bima Yojana (RSBY) in Karnataka revealed that as per beneficiaries responses main factors to create barrier in utilization of services were, rejection from the hospitals, lack of awareness, and availability of fewer services. Acceptance by the hospital is one of the main factors that





is encouraging the service utilization. Further the research revealed that negative aspects include no reimbursement and no proper guidelines from State Government. Delay and uncertainty in the payment of claims by the insurance companies is the major reason informed by the hospitals for not providing treatment to the card holders

### The Way Forward:

The majority of population lives in rural areas, and primary health care is essential health care which should be available and accessible to all equally without any regional and geographical discrimination. The Right to Health is a basic human rights which is protected by Article 21 of Constitution of India. Thus, it is primary responsibility of the Government to create good quality health care systems which take care of overall well being of the people especially marginalized and poor regardless of their socio economic background and paying capacity. Therefore it is quite important to look at the challenges so that timely actions can be taken on priority basis by assessing existing situation of health status of the people.

In the case of Health and Wellness Centre, the greater responsibility would be on middle level health professionals because they will be the first contact person. So, the challenge is to create this health care workforce in a time bound manner. These professionals should have minimum skills and relevant experience in health service sector who can understand medical complications from the medical and social perspectives. Another challenge is to consult the doctors continuously in each and every case which seems to be difficult keeping in view the infrastructural and manpower issues. It is assumed that these centres will “bring health care closer to home” but in absence of required manpower how we will achieve that objective, needs careful attention.

In case of National Health Protection Scheme, we have already witnessed that earlier insurance schemes not benefitted completely which were primarily meant for poor people. Therefore independent and transparent system should be in place to keep check on these insurance providers. More independent evaluation is required which can really suggests that whether such schemes are helping the poor people to access and avail quality health services in time and as per the individual health requirement. In such a situation to make protection

scheme useful to poor and vulnerable sections of the society, the speedy implementation and strict instructions are required with targets to achieve in time bound manner. Also transparent systems needs to be set up for its regulation and to keep check on its progress and actual benefits for poor.

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# SANITATION ROADMAP FOR CLEAN INDIA

Ankush Kumar

The Swachh Bharat Mission is the largest behaviour change programme in the world. Through mobilization of rural communities, the SBM (Gramin) has truly turned into a jan andolan, a people's movement. The Swachh Bharat Mission (Gramin) has made significant progress in the three and a half years since its launch. The rural sanitation coverage has more than doubled since the launch of the mission from 39% to nearly 84%. Over 7 crore toilets have been built across rural India under the Mission. As an outcome, over 3.6 lakh villages and 385 districts have been declared Open Defecation Free (ODF), across 17 States and Union Territories.

It is a well known fact that inadequate sanitation pollutes environment, causes diseases, kills people and diminishes welfare in the society. But apart from these, the economic impacts of poor sanitation have many negative ramifications that have not been taken seriously in India. It was Prime Minister Narendra Modi who understood the importance of clean society for a nation's prosperity and launched Swachh Bharat Mission on October 2nd 2014.

As per baseline survey conducted by Ministry of Drinking Water & Sanitation, 55 crore people were defecating in open in October 2014, which declined to 25 crore in January 2018, at a much faster pace compared to the trend observed before 2014.

The aim of the mission is to attain countrywide open defecation-free (ODF) status in five years by facilitating the installation of more than 200,000 subsidized toilets. Through various means and ways, the government has motivated people to keep their nearby environment clean and also participate in nationwide cleanliness drive. Open defecation has declined more than 50 per cent in the last four years but with continuous growth in the country's population, India needs a more structured roadmap to achieve its overall sanitation targets

From time to time, the Ministry of Drinking Water and Sanitation organises Education and Communication (IEC) activities like door-to-door IPC (interpersonal communication), Swachhta raths, rallies, marathons, felicitation of champions, quiz and painting competitions for awareness generation, and mass mobilisation of

communities across the rural hinterland are carried out for triggering behaviour change. The Government of India understood that sanitation is mainly a behavioral issue in the country and even with the best of policies, the change will only happen by changing the mindset amongst people to stop open defecation and to adopt safe sanitation practices. Since this requires engagement of community and skill in facilitation, the process takes would need a somewhat longer time to show considerable results.

The challenges pertain to capacity building at the scale of the implementing machinery in interpersonal communication, continuing focus on community involvement and collective (i.e. village as a whole) behaviour change, promoting flexibility so that states take a lead and choose approach best suited to them. It should be targeting district leadership so that collectors lead the programme proactively, targeting important influencers like children, youth, women, specially-abled citizens and faith leaders, promoting technological innovations, making the campaign a Jan Andolan, converging other development schemes with sanitation



to promote sustainability and having a robust monitoring and evaluation system to measure both outputs and outcomes.

The goal of Swachh Bharat Mission (Gramin) is to achieve universal sanitation coverage in the entire rural India by the year 2nd October, 2019. This includes provision of toilets for the entire rural population. Provisioning of sanitation facilities for Schedule Castes/ Schedule Tribes is an important priority under SBM(G). Under the revised guidelines of SBM(G), provision of incentives has been widened, including APLs belonging to SC and ST categories. The progress achieved under SBM(G) for SCs/STs is also being monitored through the online monitoring system. Upto December, 2016, out of the total of 127.43 lakh Individual household toilets constructed during 2016-17, 21.60 lakh (16.95 per cent) IHHLs are from SCs families and 20.77 lakh (16.30%) IHHLs are from STs Families.

The Swachh Bharat Mission is the largest behaviour change programme in the world. Through mobilization of rural communities, the SBM (Gramin) has truly turned into a jan andolan, a people's movement. The Swachh Bharat Mission (Gramin) has made significant progress in the three and a half years since its launch. The rural sanitation coverage has more than doubled since the launch of the mission from 39% to nearly 84%. Over 7 crore toilets have been built across rural India under the Mission. As an outcome, over 3.6 lakh villages and 385 districts have been declared Open Defecation Free (ODF), across 17 States and Union Territories.

With over half the country declared ODF, the Mission is also working on sustaining the ODF status in these areas.

Terming this a "Sanitation Revolution in Rural India", the Secretary, Ministry of Drinking Water and Sanitation, Shri Parameswaran Iyer has said that the Mission is on track to achieve an ODF India by October 2019.. UNICEF estimates that the lack of sanitation is responsible for the deaths of over 100,000 children in India annually. A Bill and Melinda Gates Foundation study estimates that households in ODF villages in India have significantly better health indicators.

Another UNICEF study estimates that a household in an ODF village in India saves Rs.50,000 every year by way of disease treatment costs averted, saving of livelihood by not falling ill, etc. At the macro level, a 2007 World Bank study estimated that lack of sanitation costs India over 6% of our GDP.

The Ministry of Drinking Water and Sanitation will be launching a mass media campaign to promote the twin pit toilet soon. A twin pit toilet is a toilet model that is economical, safe, easy to clean, eco-friendly, and is effectively a self-contained waste treatment plant that does not harm the ground water beneath the toilet.

The United Nations-World Health Organization Joint Monitoring Programme for Water Supply and Sanitation defines 'improved' sanitation as the means that hygienically separate human excreta from human contact and hence reduces health risks to humans. Inadequate sanitation is thus, the lack of improved facilities (toilets, conveyance, and treatment systems), and hygienic practices (for example, hand washing, proper water handling, personal hygiene, and so on) that exposes people to human excreta and thus to disease-causing fecal-oral pathogens through different transmission pathways.

The World Health Organisation report states that one gram of feces can contain around 10,000,000 viruses, 1,000,000 bacteria, 1,000 parasite cysts and 100 parasite eggs. Open defecation poses a serious threat to the health of children in India. The practice is the main reason India reports the highest number of Diarrhoea deaths among children under-five in the world. Diarrhoea and worm infections are two major health conditions that affect school-age children impacting their learning abilities.

Open defecation also puts at risk the dignity of women in India. Women feel constrained to relieve themselves only under the cover of dark for reasons of privacy to protect their dignity. It exposes women to the danger of physical attacks and encounters such as snake bites and sexual assaults.



On the economic front, the lack of sanitation facilities costs India over 6 per cent of GDP, as per the World Bank estimates. But open defecation and lack of sanitation is not only restricted to rural India, it has also created several problems for the urban masses. Open defecation in urban areas is driven by a number of reasons including, lack of space to build toilets in high-density settlements and tenants unwilling to invest in toilets where landlords do not provide them.

India ranks top for having the greatest number of urbanites living without a safe, private toilet which is around 157 million as well as 41 million urban dwellers practicing open defecation, states a report by WaterAid, a UK-based charity working in the field of safe water and sanitation. The report further explains that in India, 381 million people – a population roughly the size of Western Europe – live in rapidly expanding urban areas, and 157 million of those people have nowhere decent to go to the toilet.

In several metro cities near the most urban societies, one can sight people urinating openly due to lack of availability of public toilets. This issue has been bothering the country for decades but due to huge migration and limited toilet facilities nothing substantial has been achieved. The government realized this issue and built several public toilets over the years but in order to increase the usage of these toilets, it was essential for citizens to be able to locate the nearest toilet. Further to this, it was envisaged that if the data of presence of toilet nearby can be made available on a publicly available online maps platform, it will provide ease of access to the citizens.

To facilitate this, Ministry of Urban Development (MoUD) has partnered with the global technology giant Google to provide location of toilets on Google Maps Platform and also has collated community and public toilet data in 5 cities of NCR (Delhi, Gurgaon, Faridabad, Ghaziabad and Noida). One can now easily search for 'public toilet' on Google Maps in an area where the service is available and can find a list of restrooms nearby, including the respective address and opening hours.

## Rejuvenation of Ganga River:

In India, rivers have been the source of life for the majority of citizens across the country. The Ganges River is extremely important to the people of India as most of the people living on its banks use it for daily needs such as bathing and fishing. Among all the rivers in India, Ganga has been treated as the divine goddess and has the second greatest water discharge in the world. Its basin is the most heavily populated in the world with over 400 million people living in the basin.

Accordingly, an Integrated Ganga Conservation Mission called "Namami Gange" has been proposed to be set up and a sum of Rs 2,037 crores has been set aside for this purpose. In addition, a sum of Rs 100 crores has been allocated for developments of Ghats and beautification of River Fronts at Kedarnath, Haridwar, Kanpur, Varanasi, Allahabad, Patna and Delhi in the current financial year.

Accordingly, Namami Gange approaches Ganga Rejuvenation by consolidating the existing ongoing efforts and planning for a concrete action plan for future. The interventions at Ghats and River fronts will facilitate better citizen connect and set the tone for river centric urban planning process.

Recognizing the multi-sectoral, multi-dimensional and multi-stakeholder nature of the Ganga Rejuvenation challenge, the key Ministries comprising of (a) WR, RD&GR, (b) Environment, Forests & Climate Change, (c) Shipping, (d) Tourism, (e) Urban Development, (f) Drinking Water and Sanitation and Rural Development have been working together since June, 2014 to arrive at an action plan. The concerned Ministers have nominated a Group of Secretaries to develop a draft action plan and have held periodical meetings to review the progress and provide guidance. NMCG has been working in parallel on a draft strategy taking into account all these developments.

India's sanitation issue is just not about open defecation and there are larger issues like poorly maintained drains in the country and lack of proper sewage disposal that creates the environment unhealthy and pollutes rivers.

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