

Key note address in the National Workshop of Unnat Bharat Abhiyan, on 7th September, 2014 in the Seminar Hall at IIT Delhi

Gandhi ji's idea to develop the Indian society was based on his understanding of the society and hence based on the village system. Talking about the importance of village, he wrote in 1936, **"I would say if the village perishes, India will perish too."**

After 67 years of India's Independence when we look towards our villages we see that there is a lot, which needs to be done. Almost 70% of India's population lives in villages. As per RBI report of 2012 about 21.66 Cr people which constitute about 26% or rural population are Below Poverty Level. A major cause of poverty among India's rural people, both individuals and communities, is lack of access to productive assets and financial resources. High levels of illiteracy, inadequate health care and extremely limited access to social services are common among poor rural people. Microenterprise development, which could generate income and enable poor people to improve their living conditions, has only recently become a focus of the government. Women in general are the most disadvantaged people in Indian society, though their status varies significantly according to their social and ethnic backgrounds.

Literacy rate in rural India is about 69% as compared to 85% in urban India. Though the Female literacy rate in rural India has increased in the past decade but still it is as low as 59% compared to 80 % in urban India. Access to quality medical care is limited or unavailable in most rural areas. According to a 2005 report, 42% of India's children below the age of three were malnourished, which was greater than the statistics of sub-Saharan African region of 28%. Approximately 1.72 million children die each year before turning one. Diseases such as dengue fever, hepatitis, tuberculosis, malaria and pneumonia continue to plague India due to increased resistance to drugs. Health issues confronted by rural people are many and diverse – from severe malaria to uncontrolled diabetes, from a badly infected wound to cancer. Postpartum maternal illness is a serious problem in resource-poor settings and contributes to maternal mortality, particularly in rural India. A study conducted in 2009 found that 43.9% of mothers reported they experienced postpartum illnesses six weeks after delivery.

Access to improved sanitation is available to only 24% of the rural population. That means more than 60 Crore people in rural area defecate in open. Though Govt. claims that about 90% of rural population has access to improved drinking water facility, but the fact is that only 31% of the 167 million rural households in India have access to tap water. The harmful impact due to lack of sanitation facilities and poor quality of water can be assessed by the fact that about 37.7 million Indians are affected by waterborne diseases annually, 1.5 million children are estimated to die of diarrhea alone.

As on 31st August 2013, a total of about 84 thousand villages of India are yet to be provided with electricity access. Though the access to electricity may be upto more than 90 percent villages but in terms of electricity connection to households the

Census of 2011 indicates that close to 43.2 percent of India's rural households continue to depend on Kerosene for lighting, while even today 0.5 percent of its population or close to 9 lakh households does not have access to lighting at all. Teledensity in rural India is about 43% as against the national figure of 74%.

In the year 2000, around 40 per cent of the villages in India lacked all-weather access roads. This constrained economic activities and access to essential services. Nearly 74 per cent of India's rural population, constituting the majority of India's poor, were not fully integrated into the national economy. PMGSY was launched in Dec 2000 to provide connectivity to all habitations having a population of more than 500 persons in densely populated villages and 250 persons in sparsely populated villages in 10 yrs period. After 14 years of PMGSY launch and after spending 1,09,638 Crs connectivity to 81% eligible habitations (1,78,184) has been made.

Agriculture and allied sectors like forestry and fisheries accounted for 13.7% of the GDP in 2013, about 50% of the total workforce. The economic contribution of agriculture to India's GDP is steadily declining with the country's broad-based economic growth. Still, agriculture is demographically the broadest economic sector and plays a significant role in the overall socio-economic fabric of India. As of 2011, India had a large and diverse agricultural sector, accounting, on average, for about 16% of GDP and 10% of export earnings. India's arable land area of 159.7 million hectares (394.6 million acres) is the second largest in the world, after the United States. Its gross irrigated crop area of 82.6 million hectares (215.6 million acres) is the largest in the world. India is among the top three global producers of many crops, including wheat, rice, pulses, cotton, peanuts, fruits and vegetables. Worldwide, as of 2011, India had the largest herds of buffalo and cattle, is the largest producer of milk and has one of the largest and fastest growing poultry industries. In spite of being second largest producer of agricultural products India reported 13,754 farmer suicides. The farmers suicide rate in India has been in 1.4 to 1.8 per 100,000 range over a 10 year period through 2005.

Though India has registered a record wheat and rice output, yields of major crops are much lower when compared with the production developed countries. According to the latest FAO report, the average yield of rice in India is 2.3 tonne/ha as against the global average of 4.374 tonne/ha. China is the largest producer of rice with an output of 197 million tonne with a per-hectare yield of 6.5 tonne while countries like Australia (10.1 tonne), US (7.5 tonne), Russia (5.2 tonne) lead the tally.

India has done better in wheat by achieving a yield closer to the global average. It has recorded an average yield of 2.9 tonne per hectare as against the global benchmark of 3.0 tonne/ha. However, it's still far from countries like France (7.0 tonne), US (3.11 tonne) and China (4.8 tonne).

Water shortage, absence of high-yield varieties of seeds and the lack of research and development are the basic causes behind the low per-hectare yield of crops in India. "If production has to go up, yield must improve.

Government of India through its various Ministries spends more than 2 lakh crores annually for rural development. Ministry of Rural Development alone spends about 80 thousand crores on schemes like MGNREGA, NRLM, PMGSY, IAY, Nirmal Gram Abhiyan, IWMP, NRDWP, BGRF etc No doubt that these schemes have been helpful in improving the condition of rural areas and masses but keeping in view the above statistics a lot more needs to be done.

For instance MGNREGA instituted with great hope that it will help in eradicating poverty from Rural India has not delivered the desired results on ground. The expenditure under this Act has marginally increased from 29.2 thousand crs in 2011- 12 to Rs 33 thousand Crs in 2013 -14. Out of this expenditure the actual wage component is only about 75%. As against 100 days of guaranteed employment National average of 43 per person days per HH in FY 2011 – 12 was achieved. The National average of persondays per HH per year is decreasing every year. This means if an average wage of Rs 150 per day is paid to a worker then the annual income of that HH through MGNREGA is about Rs 6500.

Looking at the unemployment and poverty in rural India the spending on MGNREGA should have increased but in reality it has not, due to various reasons which include corruption, malpractices, and delays in identification, processing and approval for projects/works. The poor man suffers due to dishonesty and inefficiency of authorities and officials.

I will not go into details of other schemes but the fact is that the actual outcome on ground has been extremely poor. Though we see the development on paper and Government reports but on ground the impact is not visible. The access to sanitation may have increased to 24 % and the drinking water may have reached more than 90% villages, literacy rate in rural areas may have gone up to 69%, Indra Awas Yojna and Bharat Nirman may have provided houses to 32.3 million HH, PMGSY may have connected 1.78 lakh habitations, etc but how much of this development and work is qualitative, is a big question. Can we feed our growing population in years to come, at the current pace of agricultural growth, can we provide jobs to our young population which is expected to reach a figure of about 25 crs in 2025. Can we provide quality education to 70% of India's population living in rural India and healthcare when 75% of quality health infrastructure is available in urban areas? We also need to examine if the progress so far is sustainable. Have we been able to create sustainable assets in terms of infrastructure and human resource, energy sources etc? Have we ensured the sustainability of natural resources?

An ideal village and a strong rural India should have all ingredients of development. It should have all necessary infrastructural facilities including roads, electricity, water,

communication, education institutes, healthcare facility, sustainable agriculture & energy sources, nonfarm based income generation opportunities etc.

In order to achieve that we require a need based policy, sustainable programme, rational strategy, financial planning, skilled, motivated & honest human resource, strong institutional back up, participation of stake holders and a dynamic monitoring mechanism.

In policy formation mostly it has been seen that Government follows a top down approach. In order to form a viable policy it is necessary to study the needs of beneficiaries and to include their inputs in policy formation. While charting out the strategy we find that the detailing is missing. Government thinks that by drafting a 20 page guideline and SOP of a particular scheme their job is over. India being a diverse county, we can't apply uniform procedures and cost in every part of the country. The implementing procedure and cost for MNERAGA/NGA/PMGSY/NRLM etc in Rajasthan has to be different than Tamil Nadu, for it to succeed.

Financial planning has to be done in such a way so that optimum and realistic prices are factored into and a regular fund flow is maintained. In certain cases we need to avoid straight jacketed approach. It has been observed that in certain schemes the costing is practically unviable.

Sustainability of projects and their impact on environment is important. The assets built should have a long life without damage to the environment. Poverty reduction and economic growth can be sustained only if natural resources are managed on a sustainable basis. Greening rural development can stimulate rural economies, create jobs and help maintain critical ecosystem services and strengthen and strengthen climate resilience of the rural poor.

Investment on human resource that actually carries out this work is extremely important. While working in rural areas, that too when we want people to participate in the process of governance, it is necessary that the grass root officials and panchayati representatives are educated, skilled and motivated. It is extremely sad that Panchayati Raj institutions are in a poor state of affairs. MoRD which runs schemes worth Rs 80,000 crs invests least in capacity building of Panchayats. This is clearly evident from the budgets

Schemes	2011-2012	2012-2013	2013-2014
Action Research and Research Studies	1.55	0.70	2.70
Rashtriya Gram Swaraj Yojana	84.80	89.70	0.00
Backward Regions Grant Fund	3917.00	3720.00	2800.00
Media and Publicity Scheme	14.82	11.99	13.50
Panchayat Empowerment and Accountability in Incentive Scheme (PEAIS)	30.62	39.90	0.00
Rajiv Gandhi Panchayat Sakhsharta Abhiyan (RGPSA)	0.00	42.92	589.50

All such development programmes need to be governed by a study/research based mechanism. That can be done only if research institutions are involved. Technology will play a major role in planning, implementing and monitoring of all programmes. Increase in quantity and quality of such institutions is necessary. A grid of technology and research institutes should be created to develop, exchange and share technology solutions. Compartmental approach should be done away with. Unless there is flow of information, the lab to land mission cannot be achieved. Therefore all such institutions should open their windows and allow information to flow. Every poor of this country should have an easy access to technologies, which can improve his life.

Unnat Bharat Abhiyan as I understand is a mission of IIT Delhi to extend benefit of such sustainable technologies to rural masses in order to develop model villages. Focus of this conference is to create network of technology institutes working in the area of rural development and to extend their expertise to rural India.

Organic agriculture can remove the ill effects of fertilizer and pesticides based agriculture and restore the health of natural resources. Punjab has seen the negative effects of extensive use of such chemicals on health of farmers and natural resources. Cow based agriculture, health and environment has an immense potential to generate wealth for rural poor. Receding water tables have to be restored by way of innovative methods of water management and conservation. To eradicate poverty unemployed rural youth and women have to be gainfully engaged in income generation activity based on rural resources. Keeping in view the unavailability and unreliability of electricity the solar power solutions will have to be tabbed.

Last but not the least the institutions and government departments have to work in close coordination from policy formation to implementation level in order to bring results. Hon'ble Minister for HRD has launched a wonderful platform for knowledge dissemination through E Library but it will be of use to our rural youngsters only if their school has computers, electricity and internet connectivity which are in the domain of other departments/ministries.

Unnat Bharat Abhiyan I am sure will focus on these topics and arrive at realistic solutions to develop Unnat Gaon and Unnat Bharat to further achieve Gandhi ji's dream of "Gram Swaraj".
