

Field Experiences and Opportunities in Rural India

Prof. Rajendra Prasad

Centre for Rural Development and Technology,
Indian Institute of Technology Delhi, Hauz Khas, New Delhi

**Launching of New framework of Unnat Bharat Abhiyan and
Orientation Workshop for Participating Institutes**

25th April, 2018

Introduction

“India lives in its villages”- Mahatma Gandhi

- 70% of the population in India still lives in rural areas engaged in agrarian economy
- Agriculture and allied sector employing 51% of the total work-force but accounting for only 17% of the country's GDP
- Huge developmental disconnects between the rural and urban- causing large-scale migration to urban areas
- The disconnect is largely due to wrong developmental policies, imported industrialization model and skewed urbanization
- The economic development of country largely depends on the progress of rural areas and the standard of living of rural masses

Introduction.....

- India is a continuum of rural and urban settings/locations with a strong local economy still operating based on indigenous knowledge, traditions, believes, understanding, and practices
- Modern Science, Technology and Knowledge should have based themselves on the existing socio-economic and cultural systems trying to strengthen or improve upon them wherever required instead of competing, displacing or distorting them
- This need to be corrected now through the engagement of knowledge institutions(HEIs) by first changing the ethos of these institutions themselves to make them more relevant to India that is Bharat and then applying their knowledge/inputs for rural development

Major Areas of Intervention

1. Organic agriculture and cow-based economy

- The world has already tasted the ill effects of chemicals based agriculture causing deadly diseases like cancer
- The world is looking now to Organic products, no chemicals used in agriculture practices
- Offers a large scope for building rural enterprises, right from testing, certification, training to production and processing in pre and post agriculture practices.
- Requires all kinds of skills, right from high level modern scientific expertise available in laboratories and universities to traditional agricultural practices available with people

Major Areas of Intervention.....

- Animal husbandry is closely linked with agriculture.
- Animal husbandry provides organic manure from cow dung, natural pest repellents from cow urine and many other combinations from animal husbandry products
- Many products are being prepared from cow urine and cow dung which are capable of being commercially exploited
- Other than agriculture, there are several applications in medicines, utility items etc.

Major Areas of Intervention.....

- Food products including milk, curd, ghee which are traditionally and culturally highly desirable and consumed in large quantities in India are not easily available in adequate quantity and with assured quality
- Only 10 percent of the milk produced in India is handled by the organized sector through cooperatives etc. Rest remains as unorganized sector with no control of quality
- Increasing production, assuring quality, regular supply and freshness desired in such products

Major Areas of Intervention.....

2. Water management

- Water is becoming more and more scarce with time both in the rural areas as well as the urban areas
- This is largely because of bad management and wrong exploitation of water resources
- Drinking water is a problem even in urban areas and so is the case in rural areas as well as water for irrigation
- India has enough rains. Most of that water flows down into the sea taking with it the fertile top soil
- It does not percolate down and as a result the ground water is also depleting fast, the water table going down and down almost everywhere
- There are technologies available, both in the modern sector as well as in the traditional sector for better water management

Major Areas of Intervention.....

3. Renewable energy:

- The energy from fossil fuels is no more regarded as the source of energy for future. The future belongs to renewable sources of energy.
- The solar energy sector has already become very viable and vibrant, bringing in a number of start-ups and entrepreneurs.
- There remain several other sectors totally untapped and untried. Biomass energy is one such sector.
- There is large quantity of surplus biomass generated in the country, almost going waste or being burnt badly to cause severe air pollution not only in rural areas but affecting in even urban. Surplus biomass can easily be utilized for energy production and utilization in rural areas and even to some extent in urban and semi urban areas.
- There are well developed technologies available for the purpose waiting for start-ups and entrepreneurs

Major Areas of Intervention.....

4. Artisans and rural industries:

- One of the blunders that India has committed is to ignore her artisans and rural industries in planning process for development.
- No country, particularly the industrialized ones, has achieved that status without making their artisans as an important part of the process and making their rural industries as the base for modern industrialization
- Modern industrialization is phenomenon of development and application of science and technology in production.
- Science and technology develops in research institutions and universities by scientists and academicians

Major Areas of Intervention.....

- Application of the same happens in industry through the practitioners who are none other than the artisans and the technicians coming from the traditional sector.
- There has to be a proper synergy and complementariness of the traditional and the modern sectors which is really missing in India.
- The power loom sector, the automobile sector, the repair and maintenance sector and in fact the “*Jugaads*” technologies seen all-around are demonstrative of what this kind of interphase can do in the industrial sector.
- It needs to be carried out in a more formal and organized way in order to bring out the best of the both, the modern sector as well as the traditional sector.
- These are just some examples. These can be multiplied many folds

Conclusion

- Higher Education Institutes(HEIs) can play an important role for economic development in India.
- Government should go all way out to engage HEIs and converge different development schemes and programmes in order to uplift rural areas.
- The rural development programs should combine infrastructure development, agriculture, water, energy, rural industries, education, communication/connectivity, health services and other sectors through HEIs to achieve a New India(Unnat Bharat)

Thank You