

Report of One Day Conference on “Innovative Projects for Rural Development”

A one day conclave on ‘Innovative Projects for Rural Development’ was organised by NITTTR Chandigarh in collaboration with, Panjab University, Chandigarh, IIT Ropar and PEC on 18th December 2019 at NITTTR, Chandigarh. The conclave was mainly for the Village Sarpanches and Panchayat Members of north-western states. The whole day was divided into inaugural session, two technical sessions and valedictory session.

Inaugural Session started at 11:30 am in which all the dignitaries on the dais lit the lamp and after that the institute Director, Dr S S Pattnaik felicitated the Guest of Honours Dr. Bharat Pathak and Dr Satyendra Tripathi. Shri Chetan Sahore introduced the invited dignitaries and speakers.

Prof. Pattnaik made theme presentation of the workshop and welcomed the Guests and participants. He started with a quote by Dr. Abdul Kalam “Values in schools are more important than at the later stages in higher education”. As per the recent Report on school education by Stanford University it has been found that the creativity of the school students are being suppressed under the present school education system in India. Thus, there is a need to create a support system where higher educational institutes like IITs and NITTTRs may support indirectly the school students by organising some special programmes for them. This platform of NITTTR, Chandigarh may find out some solutions and may create a support system for the school teachers and also school students, so that they can do some experiments in science and engineering subjects.

Professor Pattnaik believes in a concept that partnership builds strength, networking builds wealth and empowerment builds progress. He also talked about individual social responsibility is more important than corporate social responsibility (CSR). It is the need of hour that every individual should put in dedicated efforts for social development.



Inauguration of the conclave



Beginning with *Kulgeet*

Dr. Satyendra Tripathi who was the Guest of Honour of the Inaugural session talked about Rural Entrepreneurship and Rural Economy. He raised alarm on the challenges faced by the rural areas like migration of people from villages towards urban centres, farmers suicide, poor facilities in the sector of health, education and lack of technology and the policies not benefiting people of rural areas. He also emphasised on technological interventions to overcome these challenges. Use and introduction of low cost technology in Rural India is very crucial along with the integration of technology with policies.

Earlier the philosophy which was adopted in India was the integration of Rural and Urban areas. More or less cities were dependent upon villages. India as a country which is capable

of achieving the goals of sustainable development but for that the villages should developed as epic centre of growth. We need to balance the ecology while making transformation in rural as well as urban areas.

Dr. Bharat Pathak vice chairman, Mahatma Gandhi National Council of Rural Education (NCRE) was the Chief Guest of Inaugural session, discussed about his work in the rural sector which he had performed in the villages of Uttar Pradesh and Madhya Pradesh in last 30 years. He talked about the value of participation of rural people in the development of the villages. He discussed about the need of technological interventions in the rural sector for the better and sustainable development of the villages. Agriculture is dominant driving force of rural economy but at the same time non-farm small business and livestock rearing can also be considered because all are interdependent upon each other. As a population in Rural India, we need to understand that cluster of villages is dependent only for few things from outside ecology. For the continuous & consistent growth of the villages, some technical institutes need to help to solve their problems. Even simple technologies can help them. We can scale up further and ensure sustainability of development projects. Inclusive growth should be followed so that the fruits of the development reach to all sections of society. We should provide facilities and need to create awareness among them. It is important to address the immediate needs of the people first. The solution may be found out by collaborating with villagers and then linking it with various government schemes. Indigenous solution is better so that local people can ensure its sustainability.



Dr. Satyendra Tripathi during his address



Dr S S Pattnaik making theme presentation



Dr. Bharat Pathak, Chief Guest making key note address



Dr. UN Roy sharing experiences of NITTTR, Chandigarh in Rural Development

Dr. UN Roy Head of Rural Development Department discussed about integrated village development through projects like natural resource management, watershed management, organic farming and sustainable agriculture. He also discussed about the success of the department for starting a Organic Farmers market at Chandigarh and how the earning of farmers has increased in short span of time through this market from Rs 6500 per month in year 2015-16 to Rs. 30,000 per month in 2019-20. He discussed about the major problems of water pollution which our world is facing currently. He also presented his view to overcome these challenges by application of technologies like Watershed management, Forest management, Reviving the old structures of check dams. He focused on participation of rural people in village development work. He also emphasized how the Department of Rural Development has planned to start new Masters Programme in Rural Entrepreneurship and Green and Rural Journalism. Department has been working in collaboration with Polytechnics and various projects like sanitation, waste water treatment, purification of river using their natural mechanism, introduction of technology in agricultural area and organic farming, low cost housing and rural tourism for integrated village development. He also shared the work done by NITTTR Chandigarh under Unnat Bharat Abhiyan Project and future plans.

Mrs. Himmi Gupta was the co-anchor of this Inaugural session and she conducted inaugural session efficiently.

First technical session was chaired by Dr. J S Saini who was the former Professor of this institute and co-chaired by Dr. U N Roy. The theme of the first Technical Session was “Innovative Projects for Smart Villages”.

Prof. J S Saini started the technical session with some of his views in which he talked about how rural people need the technology on the land which are being developed at labs for the sustainable development of the villages. He also discussed about the contribution of agriculture in our Gross Domestic Product (GDP) which is about 17% and the rest contribution we get from other sectors. He also discussed the pre and post-independence scenario by which he was indicating that how agriculture/farming contribution in our country GDP has declined over the years. He discussed about the per capita land holding of each individual of India in which 86% of the farmers have average 0.6 Acre of land holding.

Average response time of ambulance in our country is 9.33 minutes, so drone ambulances have been introduced. He discussed in his session that how pattern of farming and cattle rearing has changed over the time and accordingly the needs and priorities of the farmers have also changed. He has also highlighted the poor facilities of the rural areas especially in infra-structure, health and sanitation, unemployment etc. Landless labour and small farmers all had changed livestock earlier but not possible in today's scenario because survival of families is not possible on these anymore. He discussed about the poor agriculture practices which are practiced by farmers like usage of pesticides, weedicides and chemical fertilizers which are polluting not only our land but also the ground water. There is a need to transfer of technology tackling the issues of burning of agricultural residues, portable drinking water, waste disposal and food processing etc.

Shri Gaurav Sharma, an organic farm entrepreneur was the lead speaker who made a presentation on "Innovative Organic Farming Techniques" in which he discussed how any farmer can double or triple his/her income from organic farming by proper use of technology. Natural resources management and a proper planning of farm land are required to make any farm self-sufficient. Despite the advancement in the field of pesticides & insecticides irrespective of their use, the commercial sector is not ready to give commitment in terms of increase in yield. The solution of the problem that the farmers are facing can be organic farming which is sustainable. After 5 years of experience in the field of organic farming, the Aroma Farms was designed by Shri Gaurav Sharma. Out of 13 acres, 11 acres area is used for farming. As the farm is located in the hilly region so the land is undulating and sloppy. In order to conserve the soil and water, Mr. Gaurav Sharma has followed watershed management techniques of soil and water conservation. He has dug trenches on the contours. There is number of plantation of fruit plants like kinnow, malta, papaya, banana and jamun. Earlier the rain water was going down as a runoff now there is a green cover of the grasses as well fruit plants have also become healthy with the increase in moisture into the soil. The first and foremost thing is the planning of the total land and for that purpose he has installed the pipe lines for the irrigation in all the plots. He has planned to use drip irrigation as well as micro irrigation. He has also installed a solar pump which is utilized whenever it is required. He has developed an innovative technique to utilize the local breed of poultry birds which are helping in control of some of the insects in the vegetable farms & agricultural residues as well as some of the cereals grown at the farm is fed to the poultry bird and in return he is getting organic and healthy eggs which are sellable in the market.

Shri Sharma discussed how his ideas and technological interventions are helpful in multiplying the income from farm. He focused mainly on the proper planning and designing of the farm according to the geographical pattern of land and climatic conditions. So that anyone can first needs to understand what the land requires and what output he/she can take from the land. He also discussed about the farming patterns and how to plough land so that a person can go for multi-cropping in a very small area and can easily generate their income with lots of variety of cash crops mainly vegetables. He discussed the concept of making trenches in the farmland so that the rainwater can properly get channelized into the ground which will help in recharging the ground water level of the farm. He also discussed about the importance and advantages of drip irrigation and sprinklers that how it is helpful in maximum use of available water and how it helps in less weed growth. He mentioned that the poultry farming may be a boon for a small scale farmer and a farmer can multiply his/her income with poultry farming.



Prof. J S Saini during his address



Shri Gaurav addressed the Sarpanchs



Shri Gaurav Sharma during his Presentation



Shri Harpreet Singh during his presentation

Shri Harpreet Singh from GND Polytechnic Ludhiana presented the success story of GND polytechnic under CDTF scheme. Under CDTF scheme the GND Polytechnic has trained more than ten thousands students in last 20 years. Out of ten thousand more than 60% have got wage and self-employment in India and abroad. About 400 trained persons have gone abroad in the countries like UAE, Muscat, Oman, Canada and other countries. GND Polytechnic Ludhiana received Best Polytechnic Award working under CDTF scheme in the year, 2017 by NITTTR, Chandigarh.

Under Unnat Bharat Abhiyan GND Polytechnic has adopted 5 villages and they are undertaking various projects for integrated village development. They have developed a website for Database Management. This website has all information related to village development like schemes run by government at panchayat level, details of unemployed youth, area under agriculture and facilities available in the villages. Provision of online funds transfer by NRI's and much important information related to village development.

Dr. Govardhan Assistant Professor from NIT Raipur made a small presentation in which he emphasised on value education for the rural youth for their contribution in the growth of the nation.

Dr. U N Roy was the Co-Chairperson as well as convener of the session concluded the first session with vote of thanks to all the Experts and people who were presented in the auditorium.

Second technical session was chaired by Dr. Y K Anand who was the former Professor of this institute and co-chaired by Dr. C Ramakrishna who is Professor and Head of the Computer Science & Engineering. The theme of the second Technical Session was “Prospects and Challenges of Village Development”.

This session was started by experience sharing of a young Sarpanch named Ms. Seema who is only 21 years old from a village Duserpur, Gulcheeka in Kaithal Haryana. She has done many village development works for her panchayat in which the major work in education, sanitation, security and solar lights, concrete pathways and school infrastructure ground for kids, parks and solar panels for electricity supply. She is a very good example for the young panchayat members who are willing to do village development work. She regularly meets with all the nodal officers for solving the problems of village. She tries to take care of all the matters of village by herself and by taking along all panchayat members.

Another young sarpanch from Seechewal village named Tejinder Singh shared Wastewater Treatment Project done at Village Seechewal. According to Tejinder villages play an important role in the maintaining ecology. We protect the natural resources as per our tradition and religious discourse. These values need to be imbibed among the youth today. He quoted the saying of Shri Guru Nanak Dev Ji “*Pavan guru paani pitaa, maataa dharat mahat*” which means “Air the guru; Water, the father; and Earth, the great mother.” Honor all of the life, Naanak reminds us, preservation of ecology is imbibed in our culture and tradition. He discussed the topic of water pollution and river pollution and how people and major factories are contributing in water pollution intentionally or unintentionally. He shared information about the water treatment system which they have developed in Seechewal village. They started treating waste water coming out from their houses till it reaches to the big treatment plant. They use treated water for irrigation. As we see in the aspect of sanitation the whole village has covered drainage system and there are many facilities like community centre, hockey ground, gym and much more. He also showed the whole village development work which was done in his village for making this village a model village in Punjab.



Ms. Seema Sarpanch Village Duserpur, Gulcheeka during Presentation



Mr. Tajinder Sarpanch Village Seechewal during Presentation



Presented by Shri Sumit Arya Sarpanch Village Mukrauli Khurd

Shri Sumit Arya a young sarpanch from village Mukrauli Khurd, Rohtak, Haryana started his speech by saying “In India one cannot imagine a city without villagers” shared village development work which he has done in his village, like building of water storage tanks, construction of many other things. He has so far invested Rs. One crore in his village where other villages could not achieve the target even by spending Rs ten crores with his dedicated efforts and got 5 stars rating from Govt. of Haryana. He also talked about sanitation and how he has created awareness among villagers by distributing pamphlets and other modes.

Mr. Shailander, Chairman, MC Kaithal shared their municipal development work such as Community Centers(2), Stadium, Municipal Bhawan, 50 beds in hospitals and Court Complex is developed,7 acre park, plantation in the area.

Dr. C Ramakrishna was the Co-Chairperson of the session concluded the second technical session with vote of thanks to all the Experts and Sarpanchs.

In Valedictory Session Dr. SS Pattnaik, felicitated his excellence Shri Bandaru Dattatreya the Chief Guest and Shri Virender Kanwar Guest of Honour and after that Dr U N Roy introduced the people on the dais. Prof. SS Pattnaik talked about the theme of whole workshop and welcomed the Guests. He talked about the wide gap between higher education and school and NITTTR, Chandigarh is trying to provide the platform to school kids to develop their skills and creativity.

Dr. U N Roy presented the report of whole day of the seminar and talked about the work done by Rural Development Department like setting up of Organic Food Market for the the direct benefit of farmers by developing a network of the farmer and buyers. He also talked about the work done under Unnat Bharat Abhiyan and Community Development through Polytechnics and also shared the future plans.

Dr. Gulshan Sharma Director General of International Chamber for Service Industry who was the Guest of Honour mainly talked about the rural tourism and how this tourism is effective in generating livelihood for the rural people. He focused on many types of rural tourism like Agro-tourism, Farm Tourism, Wilderness and Forest Tourism, Green Tourism and Ecotourism. He talked about the scope of rural tourism in states like Himachal Pradesh and what type of tourism is best according to the geographical and climatic condition of the area.

Shri Virender Kanwar, Minster of Rural Development & Panchayati Raj who was the Guest of Honour talked about the rural development activities which is being undertaken in Himachal Pradesh and how the skill development and village development activities are

helping people to uplift their social as well as economic status of 2, 82,300 people who are below poverty line through various projects mission for their self-employment and livelihood.



Participants during Valedictory Session



National Anthem



Dr S S Pattnaik Address



Guest of Honour Shri Virender Kanwar,
Minister RD&PR Himachal Pradesh
Address

He also talked about how they are implementing MNREGA in the state and how MNREGA activities are also helping them in skill development as well as in village development. Shri Sanjeev Sood who is the Project Development Officer of Rural Development Department of Himachal Pradesh presented about the ongoing schemes and work done under them like Mukhya Mantri Yuva Aajeevika Yojana, National Rural Livelihood Mission (NRLM), Deen Dayal Upadhyaya Gramin Kaushal Yojana etc.



Chief Guest Shri Bandaru Dattatreya, Hon'ble
Governor HP Address



Dr. UN Roy Address and Final Report
Presentation

Shri Bandaru Dattatreya, Hon'ble Governor Himachal Pradesh was the Chief Guest of this session. Firstly, he welcomed the all dignitaries on the dais and all the people especially the village Sarpanches in the auditorium and appreciated NITTTR, Chandigarh for the organisation of conclave on Rural Development. He started with saying of Mahatama Gandhi which said that small scale industries need to be developed for Gram Swaraj and growing nation. He talked about the migration of the people from the villages to urban areas and the factors behind the migration of the people. He talked about the current situation of farmers and agricultural sector and how people need to be connected with policies so that they can get the benefits of such development projects. He talked about the organic farming and how with the help of newer technology we can increase the yield and income of the farmers. He also talked about the concept of rural tourism and how the work of rural tourism is going on in the state of Himachal Pradesh. Organic farming and livestock would not only increase the yield but also improve the health. The farmers need to play role at global level with proper marketing. Gram Sawraj may be achieved by the growth of small scale village and cottage industries. NITTTR Chandigarh is doing many activities under Unnat Bharat Abhiyan. We need to think about the achievement of sustainable development goals.

He also talked about the participation of women is important for the development of the country and women empowerment will play an important role. He also talked about to identify the problems of villages and eliminate them as required for the proper and overall development of the nation. He also appreciated the efforts of NITTTR Chandigarh in promotion of organic farmers by starting a weekly market at Chandigarh.

Shri Chetan Sahore who was the Convener of this ERDC 2019 concluded the session with vote of thanks to all the Dignitaries and people who were presented in the auditorium.