

Minutes of RuTAG meeting held at Punjab Technical University, Kapurthala on 10th March, 2010.

A meeting of RuTAG for Punjab state was organized in the committee hall of Punjab Technical University, Kapurthala under the Chairmanship of Dr. Rajneesh Arora, the Vice Chancellor. Following were the participants:

1. Dr. Rajneesh Arora (Chairman), VC, PTU, Kapurthala
2. Dr. Rajendra Prasad (Convener) Professor, CRDT, IIT Delhi
3. Dr. A.K. Jain, Director, CSSIRNE, Kapurthala
4. Dr. N.P. Singh, Dean (DEP), PTU, Kapurthala
5. Mr. Jaspal Singh, Joint Registrar, PTU, Kapurthala
6. Dr. Daljit Singh, Director, Doaba Group of Colleges, Nawanshaher
7. Dr. Ranjit Singh, Associate Professor, SBS College of Engg, Gurdaspur
8. Dr. Sanjiv Aggarwal, Associate Professor, GZS College of Engg, Bathinda
9. Dr. S.K. Malha, Associate Director, KC College of Engg., Nawanshaher
10. Sh. Surinder Singh, Director, Kheti Virasat, Punjab
11. Sh. Umendra Dutt, Director, Kheti Virasat Mission, Punjab
12. Sh. Gurmit Singh Palahi, National Rural development Society, Kapurthala

The meeting started with a welcome note by Dr. Rajneesh Arora. After welcoming he introduced Dr. Rajendra Prasad to the participants and then asked everybody to introduce themselves. Dr. Rajendra Prasad gave a presentation on RuTAG Program and its evolution. He also discussed both the ongoing and completed projects under RuTAG. He further explained that in Punjab it may be useful to concentrate in two sectors, i.e. Energy and Water. Dr. A.K. Jain, Director of Choudhary Swaran Singh Institute of New & Renewable Energy Resources, discussed about his programme of New & Renewable Energy Resources. He emphasized that whatever project be initiated should be based on the requirement of stakeholders. He also emphasized the need to develop efficient cooking chullhas or stoves considering the ill effects on health due to the traditional chullhas. He also suggested to carry out a mass awareness program to educate the rural population about the benefits of using such chullhas. Dr. Rajendra Prasad informed that IIT Delhi is involved in such

programmes already. Dr. Daljit Singh told that in Punjab these days biomass is planned to be used to generate electricity at large scale and such thermal plants are coming up at various places in Punjab. Dr. Ranjit Singh mentioned about the straw being produced in large amounts in the fields after harvesting of crops and is largely burnt to reclaim land for next sowing. The burning of straw causes huge pollution, this straw can be used for briquette formation to be used in gasifier to produce energy. Dr. Malha from KC Group of Colleges told that his team is working in this direction and can submit a proposal to RuTAG. Dr. Rajendra Prasad explained the procedure a project proposal can be submitted to RuTAG. Shri Umendra Dutt suggested that instead of using straw for gasifiers to produce energy, it is much better that we use straw for mulching in fields. He also suggested that we need to develop technologies which can be locally used for value addition of agriculture produce, post harvesting and water conservation. He further suggested that a clue can be taken from the “TONKS” which are traditional water harvesting structures used in Rajasthan to conserve water. Shri Gurmit Singh discussed various problems of Solar heating systems which they have put on in their villages. He said there is a need to develop technology to remove silt or salts deposited in solar heaters and an improved electric backup system. Dr. Daljit Singh added that instead of having large biomass based power generating plants, we need to develop small sized 5-12 Kilo Watt at village levels and students should be encouraged to take up such need based research projects in their B.Tech. or M.tech dissertations. Dr. Rajendra Prasad also explained that IIT Delhi is working on animal driven tractor and water pumps. Shri Surinder Singh said that in Punjab there is an area which is the foothills of Himalayas where such animal driven tractors and water pumps can be of immense use. He desired that if IIT could help his organization he would like to promote these in the above mentioned area. He suggested that Punjab needs an immediate solution to its increasing water scarcity and water pollution problems. He further elaborated how a large population of Punjab living in Malwa region is suffering from various health problems including cancer on account of poor water quality. There is a need to develop simple technology to purify water by removing heavy elements present in it and such technology should be easily affordable and cost effective. He said there is Reverse Osmosis systems have been planted by the state govt. but they waste a lot of water.

It was unanimously decided that a team from IIT Delhi can come to Punjab somewhere in April 2011 and explore the areas where the possibilities of working is required. Then Dr. Rajneesh Arora concluded and assured every help that PTU can render to RuTAG while working on above mentioned aspects. He even offered to start a RuTAG unit at PTU and provide a full time Researcher/Coordinator for the same under the supervision of senior faculty members. He even expressed willingness to financially support proposals for small research programmes under RuTAG unit at PTU.
