

ANNEXURE 44

RANCHI CAMPUS

FACULTY CENTRE FOR 'INTEGRATED RURAL & TRIBAL DEVELOPMENT AND MANAGEMENT (IRTDM)'

1. **Total number of class room available (seminar room, meeting room etc. may be mentioned separately)**
 - a. Class room – 23 (one class room with overhead projector facility and another one class room dedicated for conducting online classes)
 - b. Meeting room – 1
 - c. Seminar Hall – 1
 - d. Faculty room – 17
 - e. Guest room – 6
 - f. Office room – 4
 - g. Examination Hall: 1 (with about 100 sitting capacity)
 - h. Store room- 4 (for keeping stationery items, exam papers, different implements *etc.*)
 - i. Rural Innovation Centre-1 (for displaying different activities of IRTDM faculty centre)

2. **No. and details of Laboratories with brief description on the kind of work done therein, including computer laboratories.**

Laboratories – 6, computer Laboratory – 1

- a. **Microbiology Lab.:** Basic laboratory practices, preparation of Media, pH testing, sterilization, aseptic inoculation, staining procedures, serial dilution techniques, microscopic observations. Isolation of some specific soil microorganisms mainly beneficial and preparation of carrier based bio-fertilizers.

- b. **Soil Science Lab.:** Testing of soil pH, electrical conductivity, amount of organic carbon, determination of nitrogen content, phosphorus content, potassium content, moisture content, sodium and calcium content.

- c. **Mushroom Lab.:** Identification of different types of mushroom, mushroom propagation, spawn preparation, organic control of some pathogenic fungus for edible mushroom.

- d. **Tissue Culture Lab:** Not functioning

- e. **Quality Control & Molecular Biology Lab.:** Estimation of total sugar content, reducing sugar content, total soluble solids, titrable acidity, lycopene content, beta

carotene content, ascorbic acid content, chlorophyll content, starch content of different organic products.

- f. **Bio fungicide Lab.:** Isolation of *Trichoderma* sp., preparation of bio-fungicides (carrier based)
- g. **Computer Lab.:** Built with overhead projection system, 18 desktop PC with internet connection mainly used for computer practical classes, PowerPoint presentation *etc.*

3. Details of Library:

- a. No. of accessioned book – 1275, No. of donated books – 4725
- b. No. of Journals – 0
- c. Web based access to resource provided or not – Not
- d. Total built up area – 2400 sq. ft. with sitting capacity of 68.
- e. E-journal and e-database available – NO.
- f. Other printed journals and magazines – NO
- g. Total No. users (yearly)-
- h. Total No. of book issued (yearly)- 439
- i. No. of yearly visitors – 1153

4. No. of students admitted in various courses during the last 3 years (Male and female to be shown separately)

Name of the course	Year	No. of students admitted		Total
		Male	Female	
5 year Integrated course in ‘Agriculture, Rural and Tribal Development’ (ARTD)	2013-14	19	2	21
Ph. D in ‘Agriculture, Rural and Tribal Development’ (ARTD)		3	0	3
5 year Integrated course in ‘Agriculture, Rural and Tribal Development’ (ARTD)	2014-15	25	1	26
5 year Integrated course in ‘Agriculture, Rural and Tribal Development’ (ARTD)	2015-16	17	10	27

5. New educational and communication technologies used for teaching:

To make teaching interesting and practical oriented students are exposed to the experiences of progressive farmers with the concept of ‘Farmer as a teacher’ at village environment. The faculty centre is well equipped with all modern gadgets for effective communication including facility for on-line interaction with experts stationed in other universities.

6. Details to what extent is the faculty centre computerised:

The faculty centre has well maintained website with online facility to submit application, online payment through all methods, result display and computerisation of accounts.

7. Research and Extension Facility and actual work done in last 3 years

The emphasis on integrated approach and quality assurance has been the hallmark of 'Divyayan' Unit of the Ramakrishna Mission Ashrama, has been able to establish linkages with different Departments of the State and Central Governments, Indian Council of Agricultural Research (ICAR), and other national Institutes of repute. Besides the various integrated rural development activities, the Ashrama is also imparting education to the villagers through primary schools and the bridge courses under the scheme of National Institute of Open Schooling and ultimately the Faculty Centre for 'Integrated Rural & Tribal Development and Management (IRTDM)' of Ramakrishna Mission Vivekananda University. Some of the important projects and schemes taken up by the Ashrama are: watershed development project, horticulture development projects under National Horticulture Mission, seed village programme, safe drinking water and safe sanitation programme, mobile agro-clinic and agro services, routine activities like Field-days, rural extension activities, front line demonstrations, short term vocational training programmes for the rural youths, organizing Kisan melas/agricultural exhibitions using mobile audio-visual units for integrated rural development schemes. As many as 117 organizations collectively called '*Vivekananda Seva Sangha*', established at the initiative of the ex-trainees of Divyayan work for the all-round development of their own villages.

Extension Activities of the faculty:

The IRTDM faculty centre is conducting both intensive and extensive field work for the students of to acquire the with the real life situation through participatory interactions with the villagers. Students study villages extensively, identify resources available, problems etc. The students conduct demonstrations in the farmers' field on the different aspects of organic farming.

Village & Institutional visits: In each semester students must do educational visit to different villages and Govt. & Non-Govt. organizations/Institutions for detail study under different course. Students have visited the following villages during the last three year – Tirlakocha, Pachraber, Beyang, Chanpi, Gutigara, Lepsar Badri, Obar, Mungadih, Mahuatungri *etc.* located at different blocks of Ranchi district

Institutions : - District Industrial Corporation (DIC), Ranchi; Primary Health Centre (PHC), Angara and Bero; Central Tasar Research Institute (CTCRI), Nagri; Indian Institute of Natural Resin and Gum (IINRG), Namkom; Society for Rural Industrialisation (SRI), Ranchi; Food Corporation of India (FCI), Chutia; Hi-tech Hort. Farm; Horticulture and Agro-forestry Research Programme (HARP), Plandu, Ranchi.

Kisan mela: During the reporting period IRTDM students displayed their activities in ten Regional Kisan Mela (organised at block level) and three central Kisan mela of Ramakrishna Mission Ashrama at Getalsud farm.

Rural Living and Learning Experience (RLLE) and Learning through Organisational Attachment (LOA):

Extension component of the IRTDM course not only restricted to subjective domain rather execution of knowledge for the benefit of villagers. Rural Living and Learning Experience (RLLE) and Learning through Organisational Attachment (LOA) are two innovative component of the course curriculum that help students to act as a facilitator of rural change while learning from villagers and on the other hand such exercise empower the villagers to identify and solve their own problem. During the reporting period the students were attached with following organizations:

Sl. No.	Year	Name of the Organisation
1	2013-14	Navadhanya Dehradun (Utarakhand); Arizona State University Summer Research Project at Bankura(W.Bengal);Vikas Sahyoj Kendra Daltonganj (Jharkhand); Literacy India (Rajasthan).
2	2014-15	Rajputana Society of Natural History (Rajasthan), Jan Seva Parishad Hazaribag (Jharkhand Vikas Sahyoj Kendra Daltonganj (Jharkhand); Ramakrishna Mission Ashrama Narainpur (Chattishgarh).
3	2015-16	Literacy India (Rajasthan), Foundation for Ecological Society (Odisha); Ramakrishna Mission Lok Siksha Parisad (West Bengal).

Snapshot of activities during RLLE and LOA

1) Construction of a Santhali library during LOA of IRTDM students in collaboration with Arizona State University, USA through Villagers participation (Saloni village, Bankura, West Bengal).



Meeting with the villagers



Construction planning in a plot donated by a villager



Villagers providing free labour



Women engaged in designing library wall

2) During RLLE visit to a Tribal dominated village Kathertoli, Bero block, Ranchi



Students working in the village field

Demonstration of water purification using chlorine



Teaching of village children

Demonstration of mixed leaf extract

Tirlakocha, Angara block, Ranchi.



Village road construction by *shramdaan* construction



Demonstration of Vermi-compost pit



Oyster mushroom packaging demonstration

Research on organic farming conducted during the last three years:

1. Different low cost organic inputs have been formulated and their performances over the yield and quality of different crops have also been standardized.
2. Performance of different important crops of Jharkhand has been evaluated under organic growing environments through low cost production technologies.
3. Different organic plant protection homemade formulations and their performances have been evaluated through different project and dissertation work.
4. All positive outputs of the experiment on organic farming have been replicated through participatory mode of research in selected farmer's field.

8. Publication of faculty during last 3 years

Dr. Avijit Kr. Dutta

Paper Published

- ❖ Sarkar, R. and **Dutta, A. K.** (2015). Sweet Potato as a potential food crop for the tribes of Jharkhand. A Review Study. *In: Banerjee, H.; Gantait, S.; Gunri, S. K. and Sengupta, K. (Eds.), Extended Summaries, National Symposium on “Sustainable Agriculture for Food Security and Better Environment”*, December 17-18, 2015. pp. 331-332.
- ❖ Sarkar, R. and **Dutta, A. K.** (2015). Sweet Potato as a Worthy Option for Rural Livelihood: A Study on Tribal Dominating Villages of Jharkhand. *Global Journal for Research Analysis*, **4**(7): 435-436. [ISSN 2277-8160]
- ❖ Nag, D.; Roy, P. and **Dutta, A. K.** (2015). Seasonal Potato Cultivation in Ranchi District- A Comparative Study. *Human Resource Reflection*, **2**(4): 35-40. [ISSN (On Line): 2348-7518]
- ❖ Nag, D. and **Dutta, A. K.** (2014). A comparative study on present agriculture based livelihood status for the villagers of different Tolas of Chanpi village, Jharkhand. ‘*Palli Charcha*’-*The Indian Journal of Rural Studies*, **1**(1): 61-75. [ISSN 2350-1227].
- ❖ Adhikari, S. and **Dutta, A. K.** (2014). Study on the yield and quality attributes of potato grown through organic farming. *Proceedings of the National Seminar on Organic Agriculture-Challenges & Prospects* conducted at Palampur, Himachal Pradesh, India during 28-29 May, 2014, pp. 96-100.
- ❖ **Dutta, A.K.**, Shirin Akhtar, C. Karak and **P. Hazra.** (2013). Gene actions for fruit yield and quality characters of tomato through generation mean analysis. *Indian Journal of Horticulture*, **70**(2): 230-237. [ISSN: 0972-8538].

Published Book Chapter(s):

- ❖ Kumar, R. and **Dutta, A. K.** (2015). Pests of Brinjal (Eggplant) and Their Management. *In: Pests of Vegetables: Bionomics and Management.* Laskar, N.; Chatterjee, H. and Biswas, S. (Eds.), New India Publishing Agency, pp:11-40. [ISBN: 978-93-85516-01-6]
- ❖ Mahto, A.K.; Adhikari, S.; **Dutta, A. K.**; Patra, S. and Swami Bhaveshananda (2015). Nutritional status and longevity of *Kunapajala* by mixing with different carrier materials. *In: Sustainable Rural Development through Soil Health and Fertility Management in Agriculture.* Singh, S. N.; Singh, G. P.; Singh, S. R. and Singh, A. K. (Eds.), Kshitiz

Prakashan, S1/131, Narayanpur, Shivpur, Varanasi-221003, pp. 92-98. [ISBN: 978-81-88863-57-0].

- ❖ Oraon, V.; Nag, D.; **Dutta, A. K.**; Patra, S. and Swami Bhaveshananda (2015). Nutritional status and longevity of *Shashyagavya* prepared by utilizing different locally available bio-resources. *In: Sustainable Rural Development through Soil Health and Fertility Management in Agriculture*. Singh, S. N.; Singh, G. P.; Singh, S. R. and Singh, A. K. (Eds.), Kshitiz Prakashan, S1/131, Narayanpur, Shivpur, Varanasi-221003, pp. 168-172. [ISBN: 978-81-88863-57-0].
- ❖ Mohanta, S.; **Dutta, A. K.**; Patra, S. and Swami Bhaveshananda (2015). Nutritional status and longevity of *Sanjivani* prepared by using different bio-resources. *In: Sustainable Rural Development through Soil Health and Fertility Management in Agriculture*. Singh, S. N.; Singh, G. P.; Singh, S. R. and Singh, A. K. (Eds.), Kshitiz Prakashan, S1/131, Narayanpur, Shivpur, Varanasi-221003, pp. 60-65. [ISBN: 978-81-88863-57-0].
- ❖ **Dutta, A. K.** (2014). Organic Production of Vegetables. *In: Hand Book of Vegetables*. Peter, K. V. and Hazra, P. (Eds), Studium Press LLC, P.O. Box 722 200, Houston, Texas-77072, USA, Vol. II, Chapter-11, pp. 351-384. [ISBN: 1626990387].
- ❖ Singh, D. K. and **Dutta, A. K.** (2014). French Bean. *In: Hand Book of Vegetables*, Peter, K. V. and Hazra, P. (Eds), Studium Press LLC, P.O. Box 722 200, Houston, Texas-77072, USA, Vol. III, Chapter-6, pp. 151-191. [ISBN: 9781626990395].
- ❖ **Dutta, A. K.** (2013). Contract Farming. *In: “Advances of Rural Development for Sustainable Agriculture”* in Das Gupta, D. (Ed.). M/S Agrobios (India), Jodhpur, Rajasthan, Volume-II: Part-A. pp. 79-95. [ISBN (13): 978-81-7754-530-2]

Dr. Arunava Sengupta

Paper Published:

1. Family Farms of East Singhbhum, Jharkhand : Complexities and Priorities of Sustainable Development. Seventh National Extension Education Congress, 2014.
2. Gender Dynamics in Agriculture: Looming Lights from the family farms of East Singhbhum, Jharkhand. *Human Resource Reflection International Journal*, Volume 2, Issue 4, July 2015.

Published Book Chapter(s):

1. **Sengupta, A.** (2013). "Information and Communication Technology and Rural Development". In: Das Gupta, D. (Ed.), *Advances of Rural Development for Sustainable Agriculture, Agrobios, Volume -3, Part-B.*
2. Biswas, S. and **Sengupta, A.** (2014) " Participatory Adaptive Research for Promotion of Organic Farming : Case Study from a Tribal Village in Jharkhand. In : Rakshit, S and Paramanik, R.N. (Ed). *Rural Development Emerging Challenges in the New Millennium, Abhijeet Publications : 205- 217*
3. Koustab Mazumdar, **Sengupta, A.** and Jha, B.K.(2015) *Social and Livelihood Matrix of Rural Jharkhand : A Case Study : Lambert Academic Publishing, Germany ISBN: 978-3-659-81709-0.*

Dr.Punit Kumar Agarwal

Paper Published:

- **Agarwal, P.K.,** Pandey, D., Yadav, P and Singh, O.P., Trends Of Area, Production and Productivity of Soybean Crop In Madhya Pradesh, *International Journal of Tropical Agriculture*, 32(3-4), 797-800, 2014.
- **Agarwal, P.K.,** Singh, O.P., An Economic Analysis of Soybean Cultivation in Ratlam District of Madhya Pradesh, India, *Indian Journal of Agric. Research*, 49(4) 308-314, 2015 .
- **Agarwal, P.K.,** Singh, O.P., An Economic Analysis of Soybean Cultivation in Hoshangabad District of Madhya Pradesh, India, *Indian Journal of Economics & Development*, 11(4), 869-876, 2015.

Book Chapter:

- **Agarwal, P.K.,** Pushpa and Sirohi, S., The Falling Farm Hands for Indian Agriculture: Understanding the Brain Drain of Rural Youth from Agriculture Farming to Non-Agriculture Sector, *Family Farming and Rural Economic Development*, 99-108, 2015.

Dr. Dipankar Chatterjee

Books:

- Dash Sharma, P and **D. Chatterjee** (Eds.). 2013. *Livelihood and Health: Issues and*

Process in Rural Development. Serials Publications: New Delhi [ISBN: 978-81-8387-629-2].

- Das, S. Dey, S. Nath and **D. Chatterjee**. 2014. *Sexuality, Identity and Health: Same-Sex Behaviour of Urban Indian Men*. Ashwin-Anoka Press: New Delhi [ISBN: 978-81-904750.

Journals:

- Arindam Ghosh, **Dipankar Chatterjee** and Rudrajit Sarkar. 2014. “Visible Labor and Invisible Wage: Tribal Women’s Contribution in Household Economy through Unpaid Work”. *Tui: A Journal on Tribal Life and Culture*, 18 (2), Tribal Research and Cultural Institute, Govt. of Tripura. [ISSN No: 2319-7382].
- Naresh Kumar, **Dipankar Chatterjee** and Rudrajit Sarkar. 2014. “SHG and Social Empowerment: A Study among Tribal Women of Jharkhand”. *Tui: A Journal on Tribal Life and Culture*, 18 (2), Tribal Research and Cultural Institute, Govt. of Tripura. [ISSN No: 2319-7382].
- **Dipankar Chatterjee**. 2015. “Ethno-ecological Knowledge of a Transhumant Community: A Portrayal on Selected Ecological Domains of the Gujars of Himachal Pradesh”. *Tui: A Journal on Tribal Life and Culture*, 19 (1), Tribal Research and Cultural Institute, Govt. of Tripura. [ISSN No: 2319-7382].
- **Chatterjee, D.** and A. Das. 2013. “Space and Identity: A Study on the Tradition and Change of the Gujars of Himachal Pradesh” *Antrocom* 9 (1): 131-141. Busto Arsizio, Italy. [ISSN No: 1973-2880].
- Nag, D. and **D. Chatterjee**. 2014. “Ensnared Innocence: A Study on Cross-Border Child Trafficking in the Context of West Bengal, India”. *Afro Asian Journal of Social Sciences* 5 (3):1-19. [ISSN No: 2229-5313].
- Ghosh, D. and **D. Chatterjee**. 2016. “Participatory Livelihood Plan of a Watershed Village: A Case Study in Jharkhand, India”. *International Journal of Research in Social Sciences* 6 (5). [ISSN No: 2249-2496].
- **Chatterjee, D.** and A. Das. 2016. “Cognitive Dimension of Cultural Transformation: A Study on Mental Models and Environmental Behavior among the Gujars of Himachal Pradesh. *Mankind Quarterly* (Accepted). [ISSN No: 0025-2344].

- **Chatterjee, D.** and R. Sarkar. 2016. “Bio-resource Utilization for Food and Medicine: A Case Study of a Primitive Tribal Group of Jharkhand, India”. *International Journal of Modern Anthropology* (Accepted). [ISSN No: 1737-8176].

Articles in Edited Books:

- Dash Sharma P and **D. Chatterjee**. 2013. “Introduction”. In P. Dash Sharma and D. Chatterjee (Eds.) *Livelihood and Health: Issues and Process in Rural Development*. Serials Publications: New Delhi. [ISBN: 978-81-8387-629-2].
- **Chatterjee, D.**, Arnab Das and Ramkrishna Mahto. 2013. “Inclusion of the Excluded: Empowering Rural Women through SHG Model of Microfinance”. In P. Dash Sharma and D. Chatterjee (Eds.) *Livelihood and Health: Issues and Process in Rural Development*. Serials Publications: New Delhi. [ISBN: 978-81-8387-629-2].
- Chhandogi, Subhankar and **Dipankar Chatterjee**. 2014. “People, Economy and Society: Documenting Mahuatongri Village of Angara Block, Ranchi, Jharkhand”. In Santanu Rakshit and R. N. Pramanik (Eds.) *Rural Development: Emerging Challenges in the New Millennium*. Abhijeet Publications: New Delhi. [ISBN: 978-93-5074-129-0].
- Ghosh, Arindam, **Dipankar Chatterjee** and Rudrajit Sarkar. 2015. “Visible Yet Invisible: Rural Women’s Contribution in Livelihood through Unpaid Household Work”. In: P. K. Chattopadhyay and D. Kushwaha (Eds.) *State of Health Education and Women: Glimpses of Rural India*. Renu Publishers: New Delhi.
- Mandavi, Harish Chandra, **Dipankar Chatterjee** and Rudrajit Sarkar. 2015. “Role of ICDS in Protecting Childhood: A Study in the Rural Context of Jharkhand”. In: P. K. Chattopadhyay and D. Kushwaha (Eds.) *State of Health Education and Women: Glimpses of Rural India*. Renu Publishers: New Delhi.

Articles in Magazines:

- **Chatterjee, D.** 2014. “Swami Vivekananda on Uplifting Downtrodden: A Different Socialism”. *Krishaka Devo Bhava*, 1(1). E-Magazine of Faculty of IRTDM, RKM Vivekananda University.
- **Chatterjee, D.** 2014. “Man, Nature and Development: Humanistic Philosophy of Rabindranath Tagore”. *Krishaka Devo Bhava*, 1(2). E-Magazine of Faculty of IRTDM, RKM Vivekananda University.
- **Chatterjee, D.** 2014. “Karma Festival of Jharkhand: An Intangible Cultural Heritage”. *Krishaka Devo Bhava*, 1(3). E-Magazine of Faculty of IRTDM, RKM Vivekananda University.

- **Chatterjee, D.** 2015. “Self-Help Group Model of Micro finance in India: Impact and Challenges” *Krishaka Devo Bhava*, 2(1). E-Magazine of Faculty of IRTDM, RKM Vivekananda University.
- **Chatterjee, D.** 2015. “Participatory Approach in Rural Development: Methods and Principles” *Krishaka Devo Bhava*, 2(2). E-Magazine of Faculty of IRTDM, RKM Vivekananda University.
- **Chatterjee, D.** 2015. “Culture and Agriculture: Some Excerpts from Prehistory and History” *Krishaka Devo Bhava*, 2(3). E-Magazine of Faculty of IRTDM, RKM Vivekananda University.
- **Chatterjee, D.** 2016. “Birhor: A Primitive Tribal Group of Jharkhand” *Krishaka Devo Bhava*, 3(1). E-Magazine of Faculty of IRTDM, RKM Vivekananda University

9. Ongoing research project with source of funding: NIL

10 National and International linkages: Nil

11. Conference and workshops attended by the faculty during last three years

Dr. Arunava Sengupta

Seminar Attended:

- ❖ Seventh National Extension Education Congress, 2014 “Translational Research-Extension for Sustainable Small Farm Development” 8-11th November, 2014 Society of Extension Education, Agra at ICAR Research Complex for NEH Region, Umiam, Meghalaya.

Dr. Avijit Kr. Dutta

Seminar Attended:

- ❖ National Seminar on “**Organic Agriculture-Challenges & Prospects**” held at CSK Himachal Pradesh Krishi Vishvavidyalaya, Palampur, Himachal Pradesh, India from 28-29 May, 2014.
- ❖ First International Conference on “**Bio-resource and Stress Management**” held at Science City, Kolkata, India from 6th February to 9th February, 2013.

Dr. Dipankar Chatterjee

- ❖ Participated in an **Orientation Programme** (Feb 02-Mar 02, 2013) organised by UGC-ASC, University of Calcutta.
- ❖ National Seminar on Securing Childhood: Challenges, Opportunities and Strategies at Xavier Institute of Social Service (XISS), (13-14 February), Ranchi, 2014.
- ❖ Indian Anthropology Congress 2015(12th INCAA Congress) on Tribal Transformations in Contemporary India: Issues and Challenges at Dept. of Anthropology, Utkal University, Bhubaneswar, 21-23 February, 2015.
- ❖ 45th Annual Conference of The Indian Anthropological Society on *Anthropology and Human Welfare* at University of Calcutta, Kolkata, 23-25 May, 2015.