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### Network of Rural and Agrarian Studies (NRAS)

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Bhubaneswar, Odisha, India

# Agrarian Transitions and Rural-Urban Linkages in India in the 21<sup>st</sup> Century

**Conference Report** 

Organised by

The Network of Rural and Agrarian Studies (NRAS)

And

Nabukrushna Choudhury Centre for Development Studies,

Bhubaneswar, Odisha

#### **Introduction: Themes and Scope**

#### 'Agrarian Transition' and Rural-Urban Linkages in India in the Twenty-first Century<sup>1</sup>

The rise of new ruralities and the hollowing out of the rural has been a recurrent theme in recent sociological accounts of rural transformation in India (Gupta 2005; Vasavi 2009; Jodhka 2012). Such accounts essentially refer to the declining role of agriculture in the livelihoods of those residing in rural areas, and consequent implications for the changing social and economic relations in villages. The modern rural non-farm economy that was seen to be primarily driven by surplus investments from agriculture is less likely to be driven by such impulses at present. The changing production patterns in agricultural production in most parts of the country over the last two decades suggests that the sources of dynamism of the non-farm economy and resulting livelihood diversification may have to be located outside the rural. Micro-level studies of changing village economies, too, point to the role of urban linkages in transforming rural livelihoods (Himanshu, Jha and Rodgers 2015).

Importantly, rural-urban distinctions that mark the literature on development dynamics have increasingly been critiqued in the wake of persistent evidence of the links between the two. Such differences as pointed out by Hnatkovskay and Lahiri (2013) have narrowed down. Developments in transport and communication allow for a convergence of labour markets to an extent as revealed by wage data trends. Such infrastructural improvements have also contributed to the phenomenon of the 'commuting worker' that clearly transcends rural-urban distinctions and constitutes a life space that is simultaneously urban and rural. Such mobilities are also made possible by a growing ruralization of formal manufacturing sector activity in the country over the last 15 years. Manufacturing sector output has increasingly come from rural areas during this period as formal manufacturing moved to rural areas to take advantage of lower land costs, and possibly lower costs of labour and environmental compliance, in some cases. With the burgeoning of services, particularly in countries like

<sup>&</sup>lt;sup>1</sup> This report was compiled by Divya Sharma, with support from M. Vijayabaskar, who wrote the concept note, and the following rapporteurs: Siddharth Joshi, Sailen Routray, AR Vasavi, Sudhir Kumar Suthar, PS Vijay Shankar, Richa Kumar, Dinesh Balam, Nidhi Balyan, Neeraj Kapoor, Sonam Goyal, Tapas Ghosh, Indranarayan Raman, Shruti Dubey, Rama Naga, Diptimayee Jena, Rashmi Samal, Koustab Majumdar and Bishnu Prasad Mahapatra.

India, rural-urban links need to be also understood in terms of the growth in services – producer, consumer, trade and financial.

Even more significant but a less understood phenomenon has been that of the self-employed in the rural informal economy, outside the domain of agriculture, and the factors driving it. While modernizing accounts would expect a decline in the numbers of self-employed with the dismantling of protectionist policies like reservation for the small-scale sector, and reduction of a range of tax concessions to traditional industries, studies point to the persistence of this form of production well into this decade albeit with poor returns. While a substantial share of self- employment is distress induced, there is still inadequate understanding of the links that such production forms with the 'modern' economy or with the rural/agrarian economy.

On a different register, in India, anti-caste social movements see the urban as the site of freedom, offering various forms of mobility and liberation from 'pre-modern' rural time-spaces ridden with caste and gender hierarchies where work only serves to reproduce identities. However, studies point out that all is not well with the urban. Rising joblessness in the urban due to the phenomenon of 'urbanization without industrialization' has been on a scale large enough to hint at the rise of a 'planet of slums' (Davis 2004). If the urban present and future are as bleak as portrayed and/or anticipated in such studies, what is the scope for the politics of social transformation and mobilization? If neoliberal market reforms render urban spaces more exclusionary, the need to look at means to render the rural more liveable by developing appropriate rural-urban linkages becomes compelling.

Further, although one recognizes the 'hollowing out' of the rural with shifts from agricultural to non-agricultural employment in certain parts of rural India, the implications of this shift in relation to changes in the urban are not clear. While, in traditional developmental accounts, this transition is symptomatic of a structural transformation of the economy, distress-induced displacement may indicate an altogether different set of processes at work. Even as returns from agriculture are declining, agricultural growth has been marked by a growing capitalisation and commodification of input markets. While demand for capital-intensive inputs such as fertilisers, pesticides, mechanised inputs and commercial seeds have intensified, land and even water is increasingly being commodified leading to partly new and more intensified forms of capital accumulation within agriculture. Such capital accumulation is likely to be concentrated more among non-rural actors suggesting the emergence of new

kinds of accumulation linkages between the rural and the urban. Rural land markets, too, are being activated by actors without economic interests in agriculture in many parts of the country. Such processes of commodification open up new questions of ecological degradation and sustaining traditional rural livelihoods.

Outside the domain of production, neoliberal reforms have further undermined the quality of rural public services like healthcare and education, paving way for the entry of private actors providing such services. The quality of provisioning of both healthcare and education in rural India is seen by its citizens to have fallen further in relation to the urban, further aggravating the rural-urban divide with regard to public support for the social basis for reproduction. Importantly, the diffusion of information, communication and transportation technologies, and intensified labour mobilities enable forging of large-scale mobilisations that transcend the rural- urban divide and intersect with electoral politics in ways that we are only beginning to comprehend. Unpacking the dynamics of the multiple linkages between the rural and the urban, and implications for sustaining rural-based livelihoods is therefore critical.

This phenomenon of rural-urban linkages can also be seen in the context of the changing character of political mobilization by political parties, state policy intervention and the nature of the ruling political elite. However, unlike the economic and sociological aspects of ruralagrarian change, these questions have largely remained unexplored. Barring the few studies which came up during late 1970s and 80s or in the late 1990s, and explained the political character of this shift, not much has been said about this issue. The new ruling elite, also known as a product of the phenomenon of 'rurban politics', has been playing a dominant role in determining agrarian politics on the one hand and success and failures of development and welfare plans on the other. Rurban is a phenomenon where the features of rural and urban politics converge. It is difficult to explain the political behavior of this new elite simply from their spatial location. Spatially these elites may live in rural areas or in small towns, which appear to be urban spaces in terms of availability of goods and services, but in their social character, they are closer to rural society. Changes in this spatial character have also changed the elite's strategies of political mobilization and negotiations. The political agenda of the 'rurban' elite is different from the rural elite of the 1970s or 80s when the focus was on preserving the rural and posing it vis-à-vis the urban. Instead, now the demands are either for urban like amenities or for modern facilities. Besides, instead of preserving the land, the

notion of compensation has become a determining feature of rural politics. One major reason behind this is to have cash and to lead an urban lifestyle.

This conference invited papers for deliberating on the multiple sets of linkages between the rural and the urban, and exploring the multiple strands of 'rural-agrarian transformation' that this entails. This is the fifth national conference of the Network of Rural and Agrarian Studies (NRAS) that was started in 2010 (in Bengaluru) with the twin goals of promoting research on rural and agrarian issues in India and providing pedagogical support for teachers and researchers on these topics. The NRAS holds these conferences in non-metros to enable scholars from rural and peri-urban regions in India to participate. After holding earlier workshops at Chidambaram (Tamil Nadu), Bhopal (Madhya Pradesh), and Allahabad (Uttar Pradesh), this national conference is being held at Bhubaneswar (Odisha), and is hosted by the Nabakrushna Choudhury Centre for Development Studies.

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#### **Summary Report by Session**

#### Day 1: October 27, 2017

#### **Inaugural Session**

Professor Srijit Mishra, Director NCDS, opened the conference with welcome remarks. This was followed by a brief introduction by NRAS representatives Richa Kumar and Sudhir Kumar Suthar about the work of the Network since its inception in 2010. They also briefly outlined the theme for the conference. Following these introductions, Bruno Dorin provided a macro-overview in his keynote lecture, India and Africa in the Global Agricultural System (1960-2050): Towards a New Sociotechnical Regime? This paper examined the asynchronous but somewhat similar agricultural trajectories of Sub-Saharan Africa and Asia, especially India, over a period of nearly a century (1961-2050). It synthesizes and discusses this dynamic by injecting data available on the past (1961-2007) and on a plausible future (2006-2050 projections by the FAO), into a simple world food model where production, trade and consumption are aggregated and balanced in calories. Given the current and/or future land-labour relationships that characterise India and Africa, the paper asks whether these regions can experience the same structural transformation that the developed countries went through, or work together towards a new socio-technical regime by developing their own regionally differentiated labour-intensive production investments and technological capacities for economic, social and ecological sustainability.

#### Panel 1: Mapping Ruralities in Eastern India

The session was chaired by Prof Srijit Mishra. In the first presentation, 'Born of the Soil': *Culture, Agriculture and the Peasant in Odisha*, Sailen Routray began with an evocative description of the landscape in central Odisha district of Dhenkanal marked by a failed monsoon. He constructs a discussion of the contemporary agrarian challenges and political processes in the region which are shaping village sociality by drawing on a conversation with a novel by Ramakanta Samantaray, 'Newton nka Trutiya Niyama' (NTN) published in 1931.

Routray's main focus was on the lives of young and old men. According to Routray, it is only the old men in the rural landscapes who can be considered as "Born of the Soil", the young men are mostly mobile, are interested in cricket and politics and are not born of the soil. Through analysis of cultural politics in rural Odisha he draws attention to a different dimension of agrarian crisis, that is the emergence of aspiration for comfort and consumption especially among the young generation. He also highlights how politicization of religion is shaped by and is shaping agrarian practices. The notion of 'dharma' or duty among the ones who were 'born of the soil' guided them towards a just society, which is being replaced by a culture of debt, consumption and politicisation of religion employing casteism which dominates the lives of young men in rural Odisha.

A question was posed by an audience member about whether the changes that Routray describes can be attributed to urbanization. The author in response argued that the changes in village sociality could not be simply attributed to urbanization, as young people were migrating for the most part not to cities but to other rural spaces within and outside Odisha.

The next paper traced a different kind of transformation in three villages in Odisha. Sabarmatee's paper, *Understanding Agrarian Technological Transitions: Continuity and Change in Rice Transplanting in Three Odisha Villages* provides a nuanced analysis of changes in rice cultivation practices. She argues that there is no simplistic linear transition to new technologies such as hybrid and GM seeds and synthetic chemicals that displace old practices. Rather, cultivation practices evolve over a period of time and are closely linked to farmers' lived social and material world including physical environment. Focussing on transplanting and sowing of rice particularly through the System of Rice Intensification, she illustrated the wide range of variations that exist. The three villages located in three districts were selected purposively in Odisha for their diverse and distinct agroecology, ethnicity, rice-growing practices, labour and wage systems, institutional interventions and SRI history.

Rice cultivation is particularly interesting because there is constant movement of labour within a short period, the cultivation demands varied types of strenuous labour and more women are involved in cultivation. Informed by the work of Paul Richards, Chayanov and Jan van der Ploeg, this paper argued that the adaptations by farmers to technological change need to be understood and respected as critical "adaptive capacity" instead of being treated as deviations or laggards as in the economics of innovation literature. Small and marginal farmers' capacity to innovate is often underestimated by state and non-governmental actors. Extension systems need to build their practices through a dialogue with farmers rather than

promote particular technologies invariantly. Further, it was evident from her case studies that the motivations or drivers for change often lay outside the production contexts of everyday agriculture. The rural is often shaped by urban, even global, visions of what farmers can or cannot do. Incorporation of farmers' point of view, their experience and knowledge is critical to make new technologies compatible.

There were several questions from participants about specific variations in cultivation practices and how SRI was being perceived and used by farmers. Sabarmatee provided additional information during the discussion. For instrance, traditional manure was being used by farmers in the coastal villages because extension agencies were promoting them in contrast to villages in interior districts that were using chemical fertilizers because of the type of soil. An interesting finding was that women who had relatively more education were engaged in wage labour. Finally, she concluded by remarking that Odisha was an interesting region since it is different from the Green Revolution states but has now become a site of state interventions promoting agrochemicals and HYV seeds and associated cultivation practices.

The last paper in this session by Aparna Jha and Aviram Sharma, *Exploring Sustainable Livelihood Diversification & Women Empowerment in Rural Bihar: The Role of Public Institutions* examined the role of public schemes in promoting sustainable livelihood diversification among women in rural Bihar. Jha focused on the operation of Agriculture Technological management Agency (ATMA) and Bihar Rural Livelihoods Promotion Society (BRLP) in the districts of Darbhanga and Nalanda. The specific program varied in each district. In Darbhanga district mushroom cultivation was promoted to improve the economic well-being of women, and in Nalanda backyard poultry was promoted by Jeevika to supplement the income of households. The underpinning assumption was that economic well-being would also lead to social empowerment for women. Through an analysis of women's involvement and perceptions of these schemes Jha concludes that the programs overall failed to achieve their objectives.

#### Panel 2: Changing Ruralities and Urbanization: Understanding Agrarian 'Transitions'

This session chaired by M Vijayabaskar began with an interesting paper that discussed the trajectory of farmers' movements in Western Uttar Pradesh from 1985-2015. In this paper Agrarian Transformation and the trajectory of Farmers' Movements: Western Uttar Pradesh, India, 1985-2015, Siddharth K Joshi focuses on Muzaffarnagar district located in the western region of the state of Uttar Pradesh and in the vicinity of the industrial clusters referred to as National Capital Regions of Delhi. He argued that Muzaffarnagar is significant for two reasons. In 1987, Muzaffarnagar was the epicentre of eruption of an aggressive farmers' movement, the Bhartiya Kisan Union (BKU) which mounted several spectacular agitations in the national capital Delhi, and brought attention to the declining fortunes of the farmers. The movement had erupted following violent communal riots in the region and it sought to unite farmers across communal boundaries as a formidable political force. In 2013, Muzaffarnagar was the site of violent anti-Muslim riots that were arguably decisive in delivering 73 out of 80 seats from the state of Uttar Pradesh to Narendra Modi's hyper-nationalist Bhartiya Janata Party (BJP) and thus propelled the Party to victory. The Party had found its strongest support base in the region amongst the same social group which had once formed the backbone of the agrarian mobilization in the late-1980s. The paper attempts to make an argument that these political developments in Muzaffarnagar are related to the specificities of the process of agrarian transformation under-way in the district in the last 3 decades.

The first part of the paper traced this process of agrarian transformation and social change in the district of Muzaffarnagar through an analysis of the data collected during field work in 2015 in 2 villages of Muzaffarnagar district comprising both household-level sample survey and detailed interviews supplemented by district and region-level macro data from government surveys and reports. The impact of the processes of liberalization and globalization that were initiated in India during the early 1990s on various aspects of the social framework within which agriculture has been practiced is traced temporally. These include the changing cropping pattern, relationship with the market, production processes, and labour utilization patterns. The paper delineates the differential impact of macroprocesses like financialization, urbanization and occupational diversification on various social groups based on their respective locations within the production processes. The second part of the paper then discussed the significance of the agrarian changes for the political processes in Muzaffarnagar, including the morphing of the Bhartiya Kisan Union using information collected through interviews from present and former BKU leaders and leaders of other farmer groups active in the district. The strategies employed by BJP to perpetuate its communal ideology and their resonance with the cultural ethos of the farming community are noted to explain the spectacular success of the party in the state. Criss-crossing the disciplinary boundaries of political sociology, political science, agrarian history and historical sociology, the paper aimed at going beyond explanations rooted in Marxism and populism and offers structural arguments for the specific turn taken by BKU.

The next paper by Koustab Majumdar, Labour Mobilization from Farm to Non-farm: Contemporary Structural Transformation of Indian Economy, addressed the issue of structural transformation of the Indian economy using a Lewisian framework, and asks what it means in a context of declining employment elasticities in both agriculture and manufacturing. This paper by Koustab Majumdar pointed out that only 30.1% of rural households derive income solely from agriculture and also that the ratio of non-agricultural to agricultural productivity has been increasing— implying that the income inequalities between those dependent on agriculture for their livelihoods and those dependent on non-agricultural sources are widening. The paper also points to differences across states with regard to the Lewisian turning point. Based on this, Majumdar makes an interesting point about how states like Andhra Pradesh (undivided), Gujarat and Maharashtra register high economic growth despite slow structural transformation. Importantly, the paper alludes to the point that growth need not be accompanied by employment generation in a context where coefficients for employment elasticity in agriculture are negative. It means that agricultural output can be increased with fewer and fewer workers. In other words, the idea that by improving returns to agriculture, we may be able to address issue of decent lives may not work either. The paper reinforces the idea of truncated transition with manufacturing not able to absorb the labour force that is being shed by agriculture.

#### Panel 3: The Urban-Rural relationship: Marginalization, Exclusion and Inclusion

The papers in this session focused on the linkages between "rural" and "urban", their nature and emergent forms. The session was chaired by Prof A. R. Vasavi. The first paper by Praveen Dhanda and Shruti Dubey explored the linkages between uneven development across rural and urban areas, focusing on the phenomenon of slums in cities. The paper, *Analyzing The Great Urban Divide: Turning the lens to the rural to understand urban slums*, highlighted the predominance of the city in development discourse. The existence of slums is conceived as a problem of housing scarcity and inadequate implementation of City Master Plans. In the last few decades, the population residing in slums has been growing faster than the rate of growth of urban population on the whole.

The paper highlighted that the policy discourse subscribes to a teleology of urbanization which is in turn premised on assumption of necessary structural transformation of the economy. The structural transformation in India has not happened as was envisaged. Even though the share of agriculture in GDP has declined at a fast pace, the decline in working population engaged in agriculture has not been at the same pace. This has often been described as 'truncated' structural transformation. In addition to these trends, in recent years, rural India has also witnessed de-industrialization. In conclusion, the paper noted that it is becoming clear that the number of slums in India and the population residing in them will only grow in future and even the informal sector may not be able to absorb the migrants into the city. Hence the paper made the case for greater emphasis on employment generation in rural areas.

Continuing the theme of invisibility of the rural, the next paper *The Print Media, Farmers and the Urban Mindscape* by Tripta Sharma examined the coverage of the rural and the agrarian in English language urban media landscape. She analyzed the imaginary of the rural constructed in the media which is consumed both by urban and rural citizens. Such an analysis is important because it explains why rural India is neglected in public policy. To explore this question, the paper examined the daily coverage by Times of India-Delhi Edition (TOI-DE) of farmers' issues between 1980-2010 and specifically of Bhartiya Kisan (BKU) agitations during this period (total of six agitations). Print media was chosen because during the time-frame of the study (1980-2010), it was still expanding in terms of readership and among the newspapers, the choice of TOI was on account of the fact that it is the widest circulated English daily. TOI is influential in political circles and is the flag-bearer of profitmaking newspaper enterprises.

The sample chosen for analysis consisted of every third year starting with 1980, (i.e. 10 years in all) and then from each year 48 days per year were chosen for analysis. Additionally, the coverage of six agitations by BKU were analyzed.

For each day's coverage, the following aspect of the story were encoded: (a) Themes of the story: Farmer movement, MSP, Land Acquisition, Others; (b) Sources of the story.

The findings show that only 3 percent of all stories analyzed were related to farmer issues. Out of these stories which were about farmer issues, the theme of 44% stories fell into the "other" category i.e. they were not linked directly to any major farmer issue. Whenever land acquisition was written about, the site was located close to the city. In terms of the sources, 47% of the stories were not attributed to any source while 33% were attributed to or quoted official sources illustrating that most of the stories did not involve speaking to an actual farmer.

In terms of framing the issues, the example of natural calamity was discussed. When for example, the Assam floods were reported on, the narratives were depersonalized, the actions of the State were the subject of reportage, whereas when floods in Mumbai were reported there was a focus on citizens - their account, experience and actions were highlighted, projecting them as victims of state's unpreparedness.

In terms of representation of farmers' movement, the demands and mobilization were largely made invisible. When they were mentioned, they were represented as hooligans causing 'inconvenience' to the 'citizens' with headlines such as "City in the Cage", "Kisan Jam".

In conclusion, the paper summarized the basic equation reinforced by the media as "Urban= Civilized" and "Rural=Underdeveloped". Farmers were mostly projected as helpless, seeking state support, often through 'blackmail' with the implication that they should not have come to the city in the first place.

The next paper Agro-biodiversity Conservation through Sustainable Consumption – An experience from the Save Our Rice Campaign focused on rural-urban linkages through activism for agrobiodiversity conservation and sustainable food consumption. Usha Soolapani and Sridevi Lakhmi Kutty from the organization Thanal, Thiruvananthapuram shared their experiences of organizing the 'Save Our Rice' campaign. Sreedevi also runs an organic produce store in Coimbatore called Bio-Basics.

Describing how she became engaged in this endeavor, Usha Soolapani said that working as an agricultural officer in the 1970s, she met several people who left other jobs to become farmers. By 1980s, however, this was no longer the case. Paddy lands were converted to coconut first and then in 1990s diverted towards rubber. The environmental movement in Kerala began at that time. Paddy lands were also wetlands and therefore water security was linked to them. In 1990s when endosulphan deaths happened, several groups came together as it was wake-up call for society. In 2003, endosulphan was banned. 2004 was the Second International Rice Year and that's when the 'Save Our Rice' campaign was launched. It began as a food movement and later seeds became central to this because companies like Syngenta were trying to control the seed market.

To make paddy cultivation viable, they realized that addressing all stakeholders including consumers and policymakers was necessary. They believed that if rice is grown in its natural habitat, then there would not be any conflict between rice and millets. But since rice is provided through PDS, most farmers who grow it don't eat it themselves.

Initially, very few farmers came for the trainings organized by them, the few who did would also continue with their own ways. They changed strategy and started organizing seed festivals, which provoked interest from farmers. And subsequently, they started creating rice diversity blocks. When farmers started growing diverse varieties of rice, the campaign recognized that it was important for consumers to start identifying with these varieties and consuming them. So they involved nutrition practitioners. Diabetes epidemic was emerging, and they started promoting awareness that polished white rice was the problem. Through food festivals they reached out to consumers and were supported by the Malayalam media. In conclusion, they argued that based on their experience of organizing the campaign and their work, they were able to connect the rural with the urban by highlighting that seeds need farmers, farmers need consumers and consumers need diverse food. The final paper in the panel Examining Linkages between Smart Villages and Smart Cities: learning from Rural Youth accessing the Internet in India outlined the findings of a study on how youth in rural areas are using mobile phones and the Internet. In this paper, Shailaja Fennell from University of Cambridge and Prabhjot Kaur from Panjab University examine the much talked about global digital divide. They used Portolan to track call time and call rates. The study areas were in Punjab and Tamil Nadu - both Green Revolution regions where incomes are high, and youth are going to colleges. Sampling was from age group of 18-25 and based on distance from the telephone tower. The sample size was 212 individuals.

Their findings show that in Punjab people prefer text messages in English or both Punjabi and English while in Tamil Nadu it was overwhelmingly in English. Young people said that the English texts sent by the company were helpful in improving their own skills. In both areas, the maximum searches were related to education, followed by entertainment. Whatsapp was the most used application. They conclude from the data that ICT primarily has a positive role to play in fulfilling youth aspirations. Smart cities need smart villages but opportunities for acquiring skills should be created for everyone to claim citizenship.

#### Day 2: October 28, 2017

#### Panel 4: Farmer's Perspectives on State Sponsored Transitions in Agriculture in Odisha

The session was inaugurated with a brief welcome address by Sabarmatee (SAMBHAV, Nayagarh). She then invited Srijit Mishra (Director, NCDS) and Sailen Routray (CSHB) to moderate the session. The session revolved around presentations by farmers who shared their experiences on governmental interventions through programs such as Paramparaghat Krishi Vikas Yojana (PKVY), Mahila Kisan Sasaktikaran Pariyojana (MKSP) and Special Programme for Promotion of Millets in Tribal Areas (Millet Mission Odisha). Farmers from the districts of Sundergarh, Rayagada and Koraput participated in the discussions of this session. First, the women farmers introduced themselves in their language, following which Sabarmatee and Sailen Routray translated their introductions into English. This was followed by presentations by the farmers.

Ms Sundei Saonta talked about the history of farming practices in her panchayat. According to her, due to government policies, farmers shifted towards chemical-based agriculture, but many Adivasi farmers are still reluctant to adopt these practices. Adivasi farmers, especially small farmers, cultivate a diverse variety of crops for their own consumption with heirloom seeds. But the variety of these seeds has come down drastically over the last two decades. They subsist primarily on millets and other naturally grown food crops. She said that she fails to understand why the government promotes chemical-based farming as the food produced is neither tasty nor healthy. But she also said that she uses modern equipment like weeders to reduce drudgery. After the launch of the PKVY, she has been promoting organic farming. She is very happy that the government is encouraging organic farming after supporting chemical intensive farming for so many years. She also works as an organic farming trainer.

Ms Filicita Topna is from Sundergarh district. Farmers in her region traditionally cultivated without any chemical inputs. Over the last two decades there is an increasing trend towards chemical-based agriculture, of which she was also a part. Then, she came in contact with an organisation, CIRTDS, that promotes organic agriculture. After interaction with CIRTDS,

she stopped using chemical fertilisers, and shifted to organic agriculture. With support of CIRTDS, they were trained in relevant agronomic practices, and started preparing *jibamruta* and *bijamruta*. In their traditional cultivation practices, they did not treat seeds, as they do now. This has reduced pest attacks. They have also received training in the System of Rice Intensification method which they follow to cultivate millets. They have achieved some success, as productivity has doubled. They cultivated mustard, potato and radish through mixed cropping using SRI methods. This was also a success without any chemical inputs. They can now prepare 10 types of organic pesticides. They promote collective farming in 17 villages. Due to PKVY and interventions by CIRTDS, there has been some shift away from chemical-based cultivation.

Ms Vaidehi Mahanto is from Sundergarh. She spoke about efforts to create a collective of landless women farmers in her region. Members of this collective train landless farmers in organic farming, and help them get land on lease. Some of them have become trainers themselves. Through organic farming, they are now able to make a decent living. Their children now go to school.

Ms Jayanti Hetrika is from Rayagada district. She shared how their involvement in the MKSP project has resulted in the community becoming strengthened. They are also promoting indigenous varieties of seeds. The arrival of farm machinery such as power tillers, sprayers, and weeders has also somewhat reduced drudgery. As a part of a collective, they now cultivate vegetables in 300 acres of land, with a good amount of production taking place. The produce is being sold locally as well as in cities in the region such as Berhampur and Srikakulam. Initially, women farmers used to feel shy and did not venture into marketing. After the project intervention, they engage in collective marketing for realising better prices.

Ms Mami Pendendi is also from Rayagada. She said that in her area MKSP has 6000 members now. In chemical-based cultivation, they had worries about procuring seeds, pesticides and other inputs. After shifting to organic farming, these worries are gone. Through MKSP, they formed many women SHG groups who collectively engage in crop planning process. They schedule cropping to synchronise harvests which makes aggregation easy. Collective aggregation and marketing have made a substantial difference to their incomes. From the time chemical farming started in their area, they saw the emergence of diseases such as blood cancer, which was unheard of earlier.

Ms Ushadebi Paika mentioned that traditionally millets were sown by broadcasting. Though

her family never went off millets, the area under cultivation was slowly shrinking. This year, members of the NGO SACAL, trained farmers in her area in the SRI method which has helped increase yields. Crop cutting experiments carried out in their fields revealed production to the tune of 1.36 tons per acre. Following this, more than 20 additional farmers in the village plan to start cultivating millets with SRI method next year.

Ms Laxmi Khillo is from Koraput district. She said that they started working with CYSD in 2002 by forming an SHG. Koraput is the land of *mandia* (ragi), and previously it was a staple for the region's people. Traditionally adivasis of Koraput cultivated millets by broadcasting. This resulted in yields of around four quintals per acre. The consumption of seeds was also high. In 2017, CYSD trained some farmers in the SRI method and in preparing organic manure and bio-pesticides. Earlier farmers did not treat the seeds before sowing. After interventions by the Millet Mission, around 300 farmers treated their seeds. This resulted in decreased attacks by pests. Harvesting has not been completed in Koraput district; but seeing the number of tillers, the expected yield is around 1.2 to 1.7 tons per acre. Finger millet and little millet were traditionally cultivated in the Koraput region. But people were not aware that these can be eaten as biscuits, upma and kheer. Due to interventions by the Millet Mission, they have learnt many new ways to cook millets. They hope that this will increase millet consumption among the new generation.

Ms Tulsi Bhumia is a community resource person in Boipariguda block of Koraput District. She is passionate about millets. Many millet varieties such as pearl millet, barnyard millet, foxtail millet are grown in the region, but finger millet and little millet are dominant. The area under millets has been decreasing due to the spread of commercially lucrative crops. Further, millet cultivation faces impediments such as drudgery and low prices. Millets were earlier consumed as various kinds of gruels. People were not aware of their nutritional benefits, but because of consumption of millets such as mandia, they did not get diseases such as high blood pressure and diabetes. She was happy that the 'Millet Mission' is addressing these concerns.

In the discussion, the first question was whether adivasis continue to practice collective farming. In response, one of the farmers said that land is not collectively shared as the tenurial arrangements are complicated. But they collectively aggregate the produce for marketing. In the KBK region, single women, widows and older farmers whose sons have migrated, provide land to landless labourers in the group. Women groups negotiate with the landowner on behalf of the landless farmers, support the latter, and collectively market the

produce. The next question was whether adivasi communities have reduced consumption of millets due to the public distribution system. The response was that Koraput is the land of mandia, and people consume mandia as their staple diet. They begin their days, especially in summer, by eating mandia.

Another audience member asked how women's identity as farmers is being strengthened through these initiatives. One of women farmers' in the panel said that before the project, women depended on men and did not feel economically empowered. They were reluctant to engage in business-related activities. Now organic vegetable cultivation has become a viable source of livelihood for women. It has increased their confidence and they have started selling their produce directly in the markets.

Concluding the session, Prof Srijit Mishra summarised the proceedings of the session. He remarked that farmers are getting back to their traditional methods, but they are also using technology, and displaying scientific temperament.

#### Panel 5: New Market Arrangements and Rural-Urban Linkages

This session was chaired by Richa Kumar. In the first paper, *Sustaining Market Intervention through Collective Action: A Case Study*, C. Shambu Prasad explores whether Farmer Producers Collectives (FPCs) are one of the possible solutions to the economic crisis faced by farmers. He posits the efforts to support producers' collectives as an alternative to policies such as farm loans and waivers that target farmers as individuals. The existing policy mechanisms including subsidies disproportionately benefits large farmers. In this context NABARD has instituted Special Producer Fund for supporting FPCs. Civil Society organisations are supporting FPCs in their promotion and sustenance, but access to capital is poor and the balance sheets of existing FPCs are weak. Investment is needed for extension activities, and FPCs need to develop business plans to assess the market demands. The author concluded that more micro level studies of existing FPC were critical for a better understanding.

In the discussion, Richa Kumar concurred that to develop a working marketing model extensive research was needed. Moreover, how caste and class hierarchies operate in the formation of FPCs needs to be examined as elite capture is likely. Whether FPCs can engage small and medium farmers remains to be seen. She also argued that examining the nature of

investment – public or private in irrigation and soil health is critical. Vijayshankar remarked that while FPOs have potential, why are banks not providing cheap finance?

The next presentation further delved into the formation of social networks among farmers. Sheetal Patil and Seema Purushothaman's paper *Social Networks Among Small Farmers in Different Peri urban areas of Karnataka* argued that social networks have the potential to bring in substantial transformation towards overcoming occupational as well as personal challenges to 117.6 million (85 percent of total holdings) of small and marginal holdings in India. Social network and interactive communication among extended families, friends, communities, villages and regions aid a dynamic skilling process among individuals.

Using a normative approach, based on both quantitative and qualitative data gathered through farm household surveys in three regions with varying magnitude of urbanization (*viz.* remote urban; agro-industrial region, newly and early urbanised regions) the paper explored patterns of social network and communication among small farmers. Decisions with respect to crops, cultivation practices, choice of livestock and rearing it, markets, credit sources and migration reflect patterns across the three sites.

The study concluded that careful attention is needed from policy makers when facilitating the formation of farmers' collectives at the local level. Different types of existing traditional institutions in different urban peripheries that support sustenance of small holders in agriculture need to find place in the newly crafted collectives in order to reduce vulnerabilities and to avoid small holders' exit from farming. Support and guidance for small holders often comes from within their fraternity itself, which is not acknowledged in state interventions.

The next paper *Transition from subsistence to commercial cash farming: The case of Sugarcane in India* examined the transformation of sugarcane from a subsistence to a cash crop, that is from 'gur/khandsari' to 'white industrialised crystal sugar'. Arun Singh in this presentation suggested that while monocropping required different methods of cultivation more irrigation and other inputs, crystal sugar required the deployment of technology, very different from the techniques to process cane into two traditional sweetening agents, 'Gur' and non-sulphur 'Khandsari' sugar. The latter required techniques stemming from traditional knowledge and was mostly produced on a small scale. On the other hand, white crystal sugar, with the by-products of molasses and ethanol is manufactured on a large scale by modern

sugar mills using modern technology. Using archival material Singh compared the transition in the states of UP and Maharashtra. While external factors were more important in UP for transition like demand of molasses for rum market, in Maharashtra internal factors like irrigation canals enabled cane production.

Shambu Prasad suggested that the work of Gandhian thinker JC Kumarappa might be useful to further develop this historical research. Richa Kumar proposed that the role of the state in promoting white sugar through the public distribution system will be interesting to analyse within this framework, and additionally issues around the sale of cane to mills for processing as well as the harmful effects on health of white sugar.

The final paper in this session addressed the importance of micro-finance in filling the credit gap in rural areas. Bibhudutta Nayak from NABARD outlined a host of initiatives such as Regional Rural Banks (1975), establishment for NABARD (1982), private commercial banks, small finance banks and payment banks, proliferation of microfinance Institutions (MFIs) that have been pursuing credit penetration and financial inclusion especially among the deprived sections. Focussing on SHG-Bank Linkage Programme (SBLP), Microfinance Institutions and Joint Liability Groups, he discussed their regional distribution and concluded that microfinance has emerged as a viable model for financial inclusion of poor households particularly in rural hinterlands. At the end he flagged some of the challenges which include widening delivery channels, creating demand driven credit products and capacity-building of SHGs.

#### Panel 6: Climate Variability, Environmental Changes and Rural Livelihood

The session focussed on how climate change affects various aspects of agriculture and rural livelihoods. Given the agroecological and geographical diversity of the Indian subcontinent, it may be expected that both the impacts of climate change and the pathways through which agrarian and other rural livelihoods are impacted are likely to be highly differentiated. Under such conditions, it is important to understand how household adaptation strategies vary even across neighbouring regions.

In the first presentation, *Household Livelihood Vulnerability and Adaptation to Floods*, Bhattacharjee and Behera examine households' livelihood vulnerability and responses to flood hazards in two administrative blocks of Murshidabad district, West Bengal (Jiaganj and Berhampore), using a livelihood vulnerability framework that combines the vulnerability framework proposed by the IPCC and the Sustainable Livelihood Framework developed by DFID. The results suggest that Jiaganj is more vulnerable than Berhampore, particularly across socio-demographic differences, livelihood options, education, health and water security, natural disaster and climate variability. Vulnerability and adaptive capacity are found to be significantly influenced by age, income, land holding and household size.

The nature of adaptation activities undertaken by households and the effectiveness of interventions directed at adaptation may also vary across regions and importantly may be shaped by the extent of overall development of a region that has been adversely affected by climate change. Based on this premise, the following paper, Effect of Rural Livelihoods Project on Adaptation Decisions and Farmers' Well-Being in Western Odisha by Patnaik, Das and Bahinipati seeks to examine whether there are any synergetic linkages between developmental activities and adaptation decisions. For this purpose they examine the effectiveness of an intervention in western Odisha, the Western Odisha Rural Livelihood Projects (WORLP) that sought to generate sustainable livelihoods in one of the poorest districts in Odisha marked by low levels of human development and high reliance on rain fed agriculture. It must be remembered that even at the aggregate level, Odishsa is one of the poorest states and hence choosing Bolangir, one of the poorest districts within Odishia helps us to understand how the poorest of the poor are affected by climate change and how they cope. While there is some evidence from previous studies that show that the intervention has indeed helped households reduce their vulnerability through improved agro-eco systems, it is still not clear whether such improvements also help households adapt better to climate change. Adopting an 'endogenous switching regression (ESR)' approach, the paper finds that such interventions do help households adapt better to climate change related vulnerabilities. Levels of technical education of the head of the household and access to rural credit are found to play a critical role in ensuring better outcomes through adaptation.

The third paper by Kalli Khosla and Ranjan Jena *The Impact of Climate Change on Agriculture: Evidence of Cereal Crops using panel regression in Karnataka* works on the assumption that climate change may have crop specific impacts. In other words, rather than look at regions, they argue that specific crops respond to variations in climate change in specific ways and this in turn generates a process of differentiation among farmers growing

different crops with regard to climate change impacts. They point out that when earlier studies measure aggregate impacts, they fail to account for seasonal and crop-wise losses due to climate change. They demonstrate this empirically by looking at how climate change affects yields in finger millet across 10 districts in the state of Karnataka using a fixed effect panel regression model to capture the causal relationship between yield and rainfall and temperature variation. They use a panel dataset of the 10 districts over a period of 1992-2013 and show that there are significant yield losses for finger millets due to climate variation in the state of Karnataka with obvious implications for rural livelihoods that are sustained through finger millet cultivation. Their paper therefore makes a case for further studies on crop-specific responses that will help nuance our understanding about the impacts of climate change.

#### Closing Plenary: "Research, Practice and Policy: The Way Forward"

The closing session was chaired by Sudhir Kumar Suthar. The panelists included NRAS representatives - A.R. Vasavi, M. Vijaybaskar, Srijit Mishra, PS Vijayashankar, Richa Kumar and C. Shambu Prasad.

A.R. Vasavi opened the discussion by outlining the imperative behind the formation of the NRAS in 2010 and its subsequent evolution. Since the 1990s, social sciences were dominated by post-modernism and cultural studies. Very few central and state universities were offering courses on rural issues and most of them were branded as courses on rural management. While there were important trends emerging in the 2000s such as the dual economy, agrarian and ecological crisis, and increasing de-agrarianisation of the rural, no substantive discussion was taking place in the media or in academica. Many in the academy were claiming that the rural doesn't exist anymore. The NRAS was launched in this context with the objectives of:

- a) Bringing together researchers and scholars working on these evolving themes;
- b) Facilitating collaboration between researchers working on these themes;
- c) Developing a repository of curricula on rural and agrarian issues
- d) Bringing to the fore neglected questions about the rural; and
- e) Engaging with policy makers.

The Network now has 120 members and the mentoring initiative for students became a valuable part of its activities. Vasavi then outlined the challenges that the Network faced

now; most prominently, the need for people who can take on responsibilities for various activities; deciding on the future form of the network and its work, and whether it should continue to remain flexible without a permanent host institution.

M. Vijayabaskar felt that more organization was required going forward beyond the responsibility for the conference. He also suggested that the Network should strengthen engagement with farmers and highlighted some key questions and issues for consideration:

a) Given that it is becoming clear that the structural transformation from agriculture to an industrial economy is neither stunted nor blocked but is not going to happen, where do we go from there?

b) There seems to be very little attention being paid to political economy.

c) Is the income from agriculture enough?

d) How do we re-valorize farming without harking back to some glorious past and ignoring the gendered and caste-based hierarchical relation to power?

Sirjit Mishra added that NRAS is a great initiative and its strength has been promoting interdisciplinary conversations which are essential for addressing current rural-urban transitions. He argued that fieldwork needs to be revalued and prioritized given the emerging dominance of big data and new statistical tools. He also suggested that scholars from the regions where the NRAS conference is being held should be given preference. Additionally in order to scale up NRAS initiatives, the network needs to engage with the government.

P. S. Vijayshankar pointed out that in the Bhopal conference (2015), the decision was taken to hold the conference in small towns, but more effort should be made to extend interaction with students and institutions beyond the conference venue in that region. Secondly, greater effort needs to be made for engaging with policy and farmers' movements in the country. He suggested that interactions with farmers should be extended beyond the conference in a more consistent form. For instance, asking them about useful research agendas, and interacting with other similar networks such as Alliance for Sustainable and Holistic Agriculture (ASHA) and Revitalizing Rainfed Agriculture (RRA) and others. Creating a structured organization will be useful for garnering funding.

C. Shambu Prasad felt that NRAS was an energizing space and more effort could be made to engage with regional scholars. He posed the question of how the growing membership can be engaged beyond the annual conference.

Richa Kumar talked about how the Network has created a community for scholars who are at the margins of research in their own respective universities and departments. Going forward, involving new people would be useful to generate new ideas.

The discussion was then opened to the audience. Usha S observed that despite being an outsider to academia she felt enriched by conversations over the last two days. Activists are often accused of bias so it was productive to engage with researchers. What is needed is to 'ruralize our cities', and create synergies between activists and researchers. Agricultural universities are not doing that work, so social scientists can play an important role.

Sudhir Kumar commented that given what Prof Vasavi said about lack of attention to the rural in 2010, it is clear that things are improving. The conference is an important move in that direction at an important conjuncture.

Bruno Dorin observed that the collegial environment of the conference made it enjoyable. He pointed out that foresight studies might be useful to imagine different scenarios of the rural by say 2050, to focus attention on them. For example, in yesterday's session with farmers, he wanted to ask them, where do they think they would be in 2050? Will their children be in city or in the village? This kind of analysis could be used to engage the media and it can have a lot of impact in engaging the attention of policy makers as well.

C. R. Das invited the participants to contribute a review of the field for the *Journal of Research Practice* that he edits. It could be a reflective article on the research practice. He said that it would be preferable if the Network remains informal to preserve its openness to different kinds of research thinking and practice.

Neeraj from NABARD suggested some possible sessions for the future: Food Sovereignty; Agriculture and Gender; Agroecology; Agriculture and Ecology; Paintings and poems about the agrarian.

Shruti from IP College felt that there should be more dialogue between rural and urban studies scholars.

Nidhi, a student participant from JNU appreciated the mentoring initiative and suggested that it would be useful for students to attend the conference to become familiar with the culture of presenting research.

Bibhu Prasad from INSEE suggested that in his experience interest in research about rural and village studies has been increasing. He also suggested that the conference could have a road show in the city where it is being held.

Shailaja Fennell suggested a greater focus on reclaiming agrarian history of India, for instance thinking of food such as *gur*, *khandsari* and rice as socio-cultural spaces. The specificity of this food should also be connected to global movements.

#### Day 3: October 28, 2017

#### **Mentoring Session**

The third mentoring and outreach session of the NRAS was held in conjunction with the 5<sup>th</sup> NRAS national conference at NCDS as a step towards fulfilling the aim of supporting the work of research scholars in non-metro institutions on issues pertinent to agrarian and rural change.

The mentoring session saw the participation of eleven research scholars, whose work spanned different themes. Prospective participants had submitted a written paper / research proposal of 1500-2000 words, on the basis of which they were selected. In the past mentoring sessions, two-three research scholars were paired with two NRAS mentors based on similar thematic or disciplinary area and would sit together in a group. Scholars would present their work and be able to ask questions regarding specific research challenges, whether it was scoping the topic, literature review, research methodology, ethical concerns, guidance for publishing, and the like.

In Bhubaneswar, a different model was tried based on feedback received from past participants. Each research scholar got an opportunity to discuss their proposal with one mentor at a time, for half an hour. In this manner, each participant received one-on-one feedback on their work from at least three mentors. Mentors had received the written submissions of participants in advance and had also been requested to compile their written feedback to be given to participants.

Overall, participants expressed satisfaction in terms of the support they received through the mentoring session and thanked the NRAS for organizing it. It is now possible to find a mentor and become part of a community working on issues of rural and agrarian change by logging into the NRAS website (ruralagrarianstudies.org).

#### **Vote of Thanks**

The conference concluded by thanking the host organisation NCDS, Bhubaneswar, and its faculty and staff for their hospitality and to Prof. Srijit Misra who had extended all support. The team also thanked the Indian Council for Social Science Research (ICSSR) Eastern Region and NABARD (Odisha) for supporting the conference.

Thanks were rendered to the key coordinator Dr. Sudhir Kumar Suthar of JNU, who had coordinated the logistics and other details and to Dr. Richa Kumar of IIT, Delhi, for once again extending herself to the conference. Dr. Sailen Routray and Dr. Siddharth Joshi were thanked for their support in coordinating the mentoring workshop and running the NRAS website, respectively.

The group collectively acknowledged Prof. A.R. Vasavi's seminal role in initiating the idea of the Network in 2010 and thanked her for her continued guidance. It was decided that the next NRAS (2018) would be held at the Central University in Gandhinagar, Gujarat, and that a team consisting of Dr. Sudhir Kumar and others would coordinate the process.