Mobilising the insights from IndoGreen

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IndoGreen

IndoGreen has yielded significant insights into policy options for sustainable upland production landscape.

It has been able to combine analytical work on interactions of farmer choice with environmental outcomes, and other social implications.

It provides information to policy makers, relevant to their long term development goals, their designs of their interventions on environmental grounds, and to their efforts to respond to other failures of markets.

IndoGreen (ACIAR ADP 2015-0431): provides evidence-based recommendations on policy, for promoting environmentally sound farming practices in Indonesia's upland area. To achieve that aim, the project will identify the main agricultural policies and analyse the trade-off between the economics and environmental impacts of the policies using the ecological and economic model.

Outline

1. Quick summary of aspects of the rural transformation work

2. Insights and illustrations from IndoGreen (this is the longer list!)

3. Insights from work on rural transformation.

The work to mobilise and implement these insights will be enhanced by consideration of the wider context of the events of interest in the IndoGreen project.

More specifically, progress on robust and salient suggestions for research and policy is more successful bearing in mind the context of 'rural transformation'

This process is the topic of another ACIAR project (ACIAR ADP 2017-024)

Rural transformation is about

1. Specialisation
2. Use of markets, and
3. Trade – local and across borders

Understanding the drivers of successful and inclusive rural regional transformation

All developing countries experience rural transformation, that is,

- a process of comprehensive societal change whereby rural societies diversify their economies and reduce their reliance on agriculture; become dependent on distant places to trade and to acquire goods, services, and ideas; move from dispersed villages to towns and small and medium cities; and become culturally more similar to large urban agglomerations

Sources: Berdegue, J., T. Rosada and A. Bebbington, (2014), 'The Rural Transformation', in B. Currie-Alder, R. Kanbur, D. M. Malone, and R. Medhora (eds), International Development: Ideas, Experience, and Prospects, Oxford.

Success matters to millions of people

- Success in rural transformation has important consequences in many dimensions.

  - Significant income growth of rural households;

  - A faster decline in poverty rates;

  - An inclusive development model for rural communities: more gender inclusiveness, increasing equality, etc.

  - Promoting food security and sustainability in the agricultural sector.

- A successful RT has been witnessed in some East Asia countries (China, Japan and Korea), but the whole process is less understood in South Asia and Southeast Asia.

- This project concentrates on the role of institutions, policies and investments (IPIs) in supporting successful rural transformation.

Questions in ACIAR ADP 2017-024

- How to understand the whole process of RT in Asian developing countries in terms of different stages, speeds and outcomes.

- How can governments influence progress (speed and stage) and outcomes? What tools can it use (investments, institutions, policies) and how and when to use them? What are the right things to do at the right times?
  - This is the policy (and ACIAR) interest.

- Method was to work at regional (not household) level in Bangladesh, China, Indonesia and Pakistan

The definition of rural transformation in this project

- Rural transformation (RT) is a combination of agricultural transformation plus the growth of non-farm employment of rural labour. It includes the change occurring within the agricultural sector and employment shifts between farm and off-farm activities.

- Key indicators are Share of high-value agriculture(RT1) and Share of rural non-farm employment (RT2)
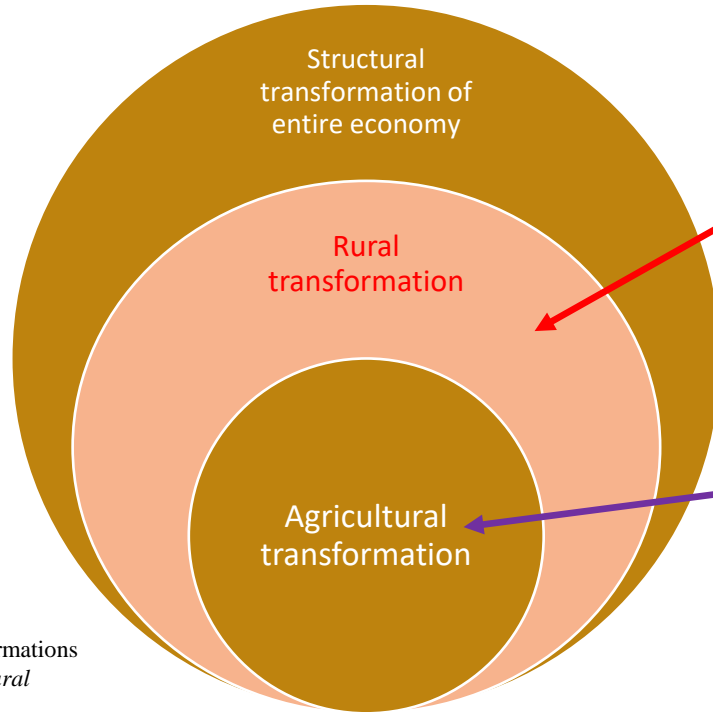
Huang, J. K., & Shi, P. F. (2021). Regional rural and structural transformations and farmer's income in the past four decades in China. *China Agricultural Economic Review*, 24. doi:10.1108/caer-11-2020-0262

Structural transformation of entire economy

Rural transformation

Agricultural transformation

The change occurring within the agricultural sector and employment shifts between farm and off-farm activities (Huang)

"a process that involves a shift from mainly subsistence farming to commercial, highly diversified production systems " (FAO)

The stages and pathways of RT: a framework

Stage	Paths of RT	Bangladesh	China	Indonesia	Pakistan
1	Staple food production				
2	Agri. diversification & commercialization				
3	Farming + part time non-farm employment	↓			↓
4	Specialisation/mechanization + full time non-farm employment			↓	
5	Integrated urban-rural + sustainable rural development		↓		

- A significant RT has occurred in the last three to four decades in Bangladesh, Indonesia, China and Pakistan; and the rate of RT has accelerated in recent years compared to earlier decades.

Key points

- Four countries' RTs all lead to a <u>structural change</u> in the economy between rural and non-rural sectors. However, the stage and speed vary, not only across countries but also across regions within a country.

- They also all led, in rural areas, to

  per capita <u>income</u> growth

  <u>poverty reduction</u> at the household level,

- But rural income <u>inequality</u> has generally deepened, though the degrees vary across regions (and it may reverse).

- We explored that more <u>gender inclusiveness</u> in terms of increasing rural females' income and access to education and healthcare will significantly promote RT, and *vice versa.*

- Our research suggests that <u>investments, policies, and institutions</u> (IPIs) play an important role in facilitating the success of RT.

  - For example, we have identified that investing in irrigation, and institutional reform can accelerate RT (making markets work better)

  - More IPIs' effects and policy recommendations will be identified in the next stage of the project.

- Further work in progress on trade flow implications and also food security consequences.

Insights (and challenges) from IndoGreen

IndoGreen says think about the environmental consequences of the transformation (erosion, carbon consequences, biodiversity), and how they can be brough to bear in farmer decision making (also about creation of markets, ie institutions and policies) – this is not yet done in the RT work

- Note that these consequences vary by region (consistent with the RT methodology) – maybe over time the models being built to identify trade-offs in IndoGreen can be used to generate input to the RT work

The modelling of crop choices in IndoGreen essentially provide more sub-regional detail and a deeper understanding on rural transformation – the incentives to shift to higher value crops, and the ways in which various forms of policy affects that transition eg the switch to vegetable production, and also more recently coffee.

- And the movement to off farm work.

Insights (and challenges) from IndoGreen (cont.)

IndoGreen generates insights into the process of 'getting to market' – and the evolution (or expectations of the evolution) of value chains, eg for coffee – details of which RT work tends to take for granted or may only identify in specific IPI studies.

IndoGreen offers insights into the impediments to the adoption of new product <u>and</u> process technology (a critical element of the RT process) in agriculture, and the value of capacity building in response.

The IndoGreen work highlights the significance of land tenure for productivity growth and also implementation of environmental policy – RT may give attention to tenure as one of its IPIs, the value of which is reinforced by the experience of IndoGreen.

Overall, RT is about raising productivity in agriculture, and the use of markets to drive that process. IndoGreen focuses on the mechanics of the same process at a sub-regional level, but also takes account of environmental impacts not often included in the calculus of value added from a social point of view.

The RT 'way of thinking' supports IndoGreen policy implementation

Useful to be able to sit regions in the RT classification, and learning from Indonesian experience and that of other countries what might be expected in a particular region – income growth, poverty, inequality, off farm work, inclusion, trade, food security.

Take in suggestions then of what IPI mix supports the progress through that current stage in each region

- That is, what IPIs support the implementation of the more targeted and specific policy measures proposed in IndoGreen (subsidies, regulation, environmental pricing, markets for environmental services etc)
  - The policy measures proposed in IndoGreen force adjustment to the transformation process, which will be easier to accommodate (generate less resistance) in the context of good choices of the IPIs.

RT provides a long term context for the (so far) more immediate analysis of policy choices in IndoGreen, which may give policies more confidence about reaching their long term goals.

RT includes attention to the matter of missing markets (eg services to facilitate market integration): this perspective is shared with IndoGreen, much of which is also about missing markets, including those for environmental services.

Last word

Work on RT has a lot to learn from IndoGreen, and its provision of local adjustment processes including their environmental consequences

But IndoGreen's policy proposals are likely to be easier to implement and more effective when done in the context of the RT way of thinking.