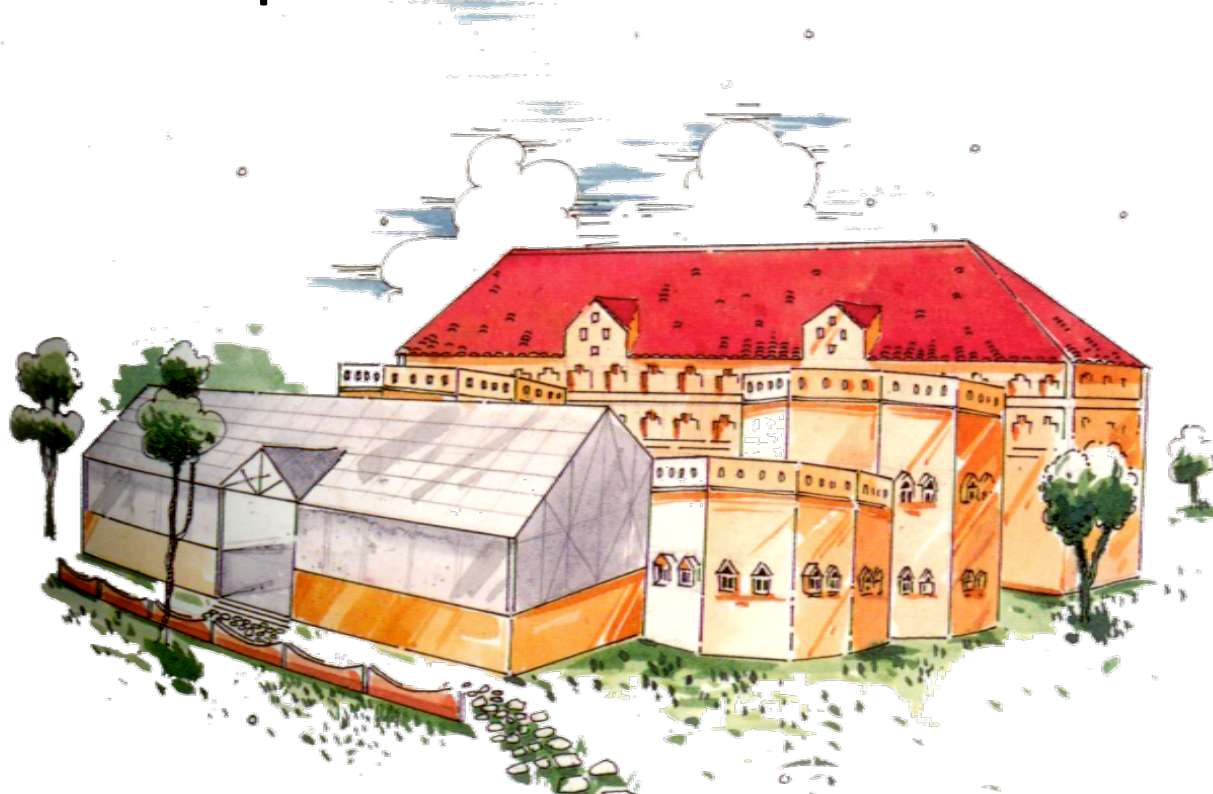


Bridging Science, Technology and Society: Practices of Transdisciplinary Implementation
on Sustainability and Environmental Change in Future Asia:

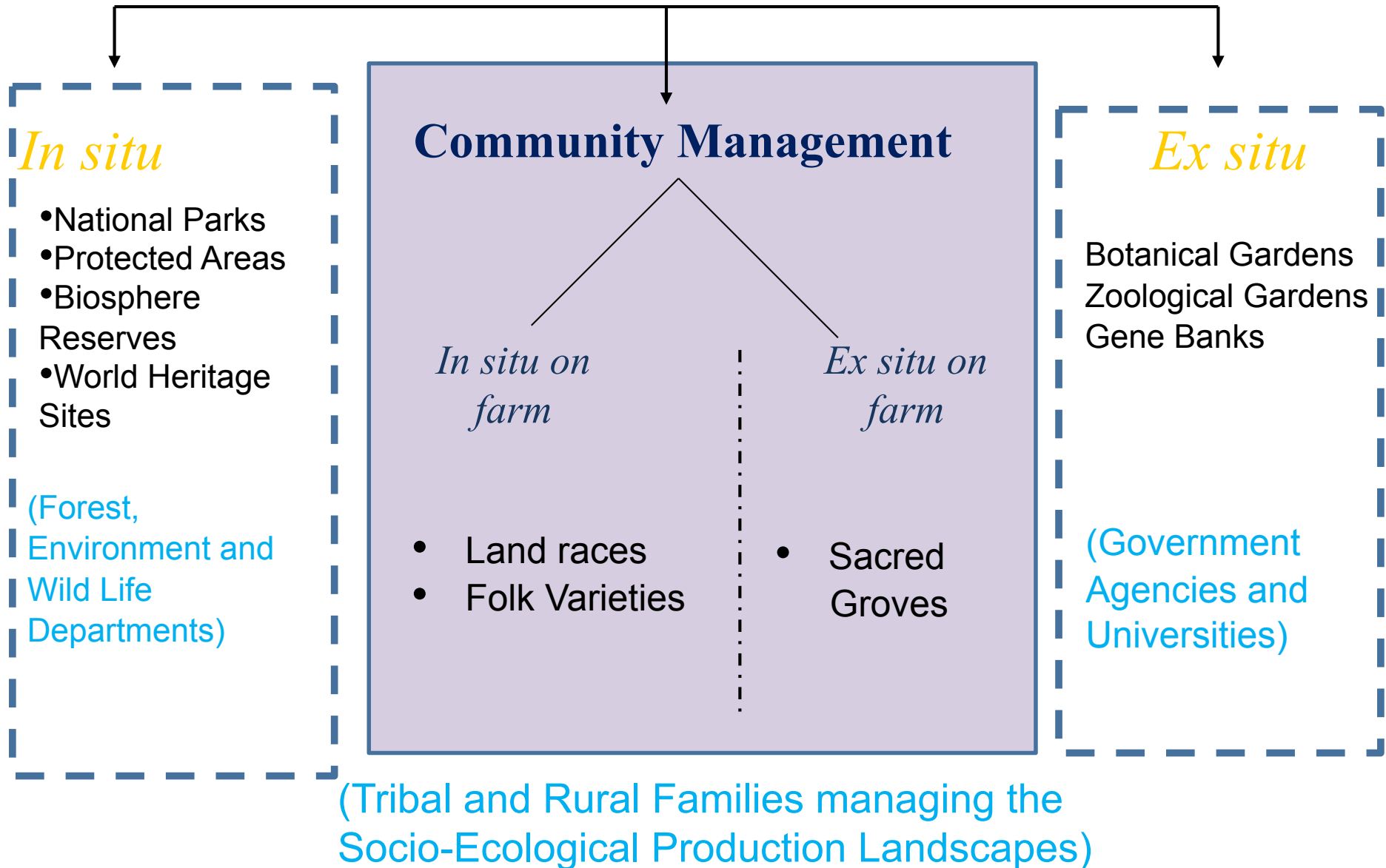
Perspectives, Science Practices and Implementations of MSSRF



M.S.SWAMINATHAN RESEARCH FOUNDATION

**Centre for Research on Sustainable
Agricultural and Rural Development**

Integrated Gene Management

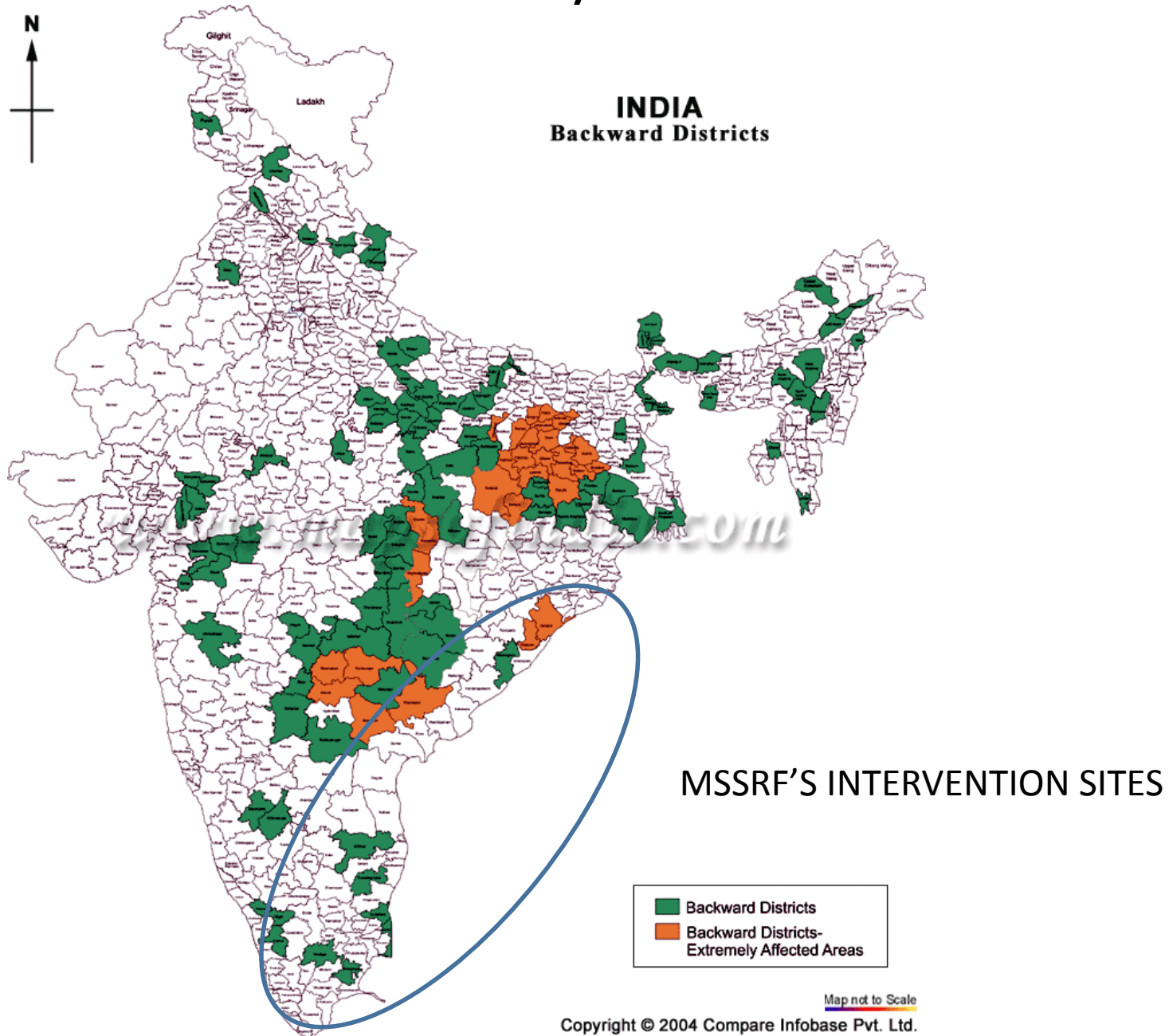


How much diversity preserved/nurtured in India?

Nr. species known in total (approx)	Nr. species domesticated (approx)	Most important to global-level food supply	Nr. domestic breeds & varieties	Nr. domestic breeds & varieties at risk	Nr. domestic breeds & varieties extinct
PLANTS 17,000 320 species of wild relatives of crop plants	44	Rice and, kodo millet, black gram, green gram and spices such as black pepper, turmeric, cardamom and ginger, and fruits such as, jack fruit and mango	Many thousands Rice: 50,000 Sorghum: 5000 Mango:1000 Pepper: 500	1000's	Not known
MAMMALS 372	12	cattle, pigs	26 breeds of cattle, 40 of sheep, 20 of goats, 8 of camels, 6 of horses, 8 buffalo	>500	Not known
BIRDS 1228	10	chickens	18 of poultry	>370	Not known

Source: (Kothari 1999).

India's Economically backward districts



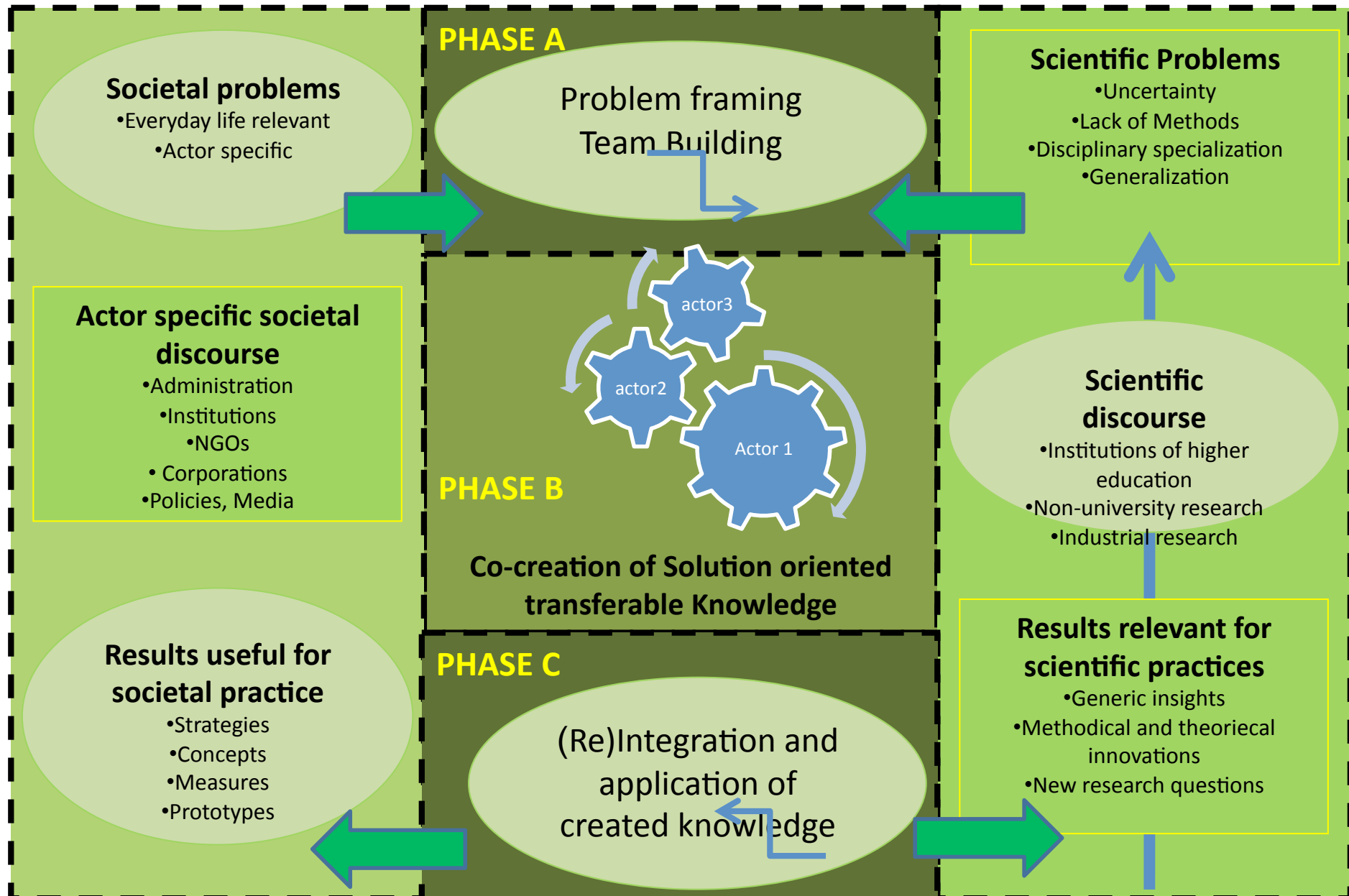
**Community Agrobiodiversity Centre
FOR REVITALISATION OF
COMMUNITY CONSERVATION SYSTEMS**



SOCIETAL PRACTICE

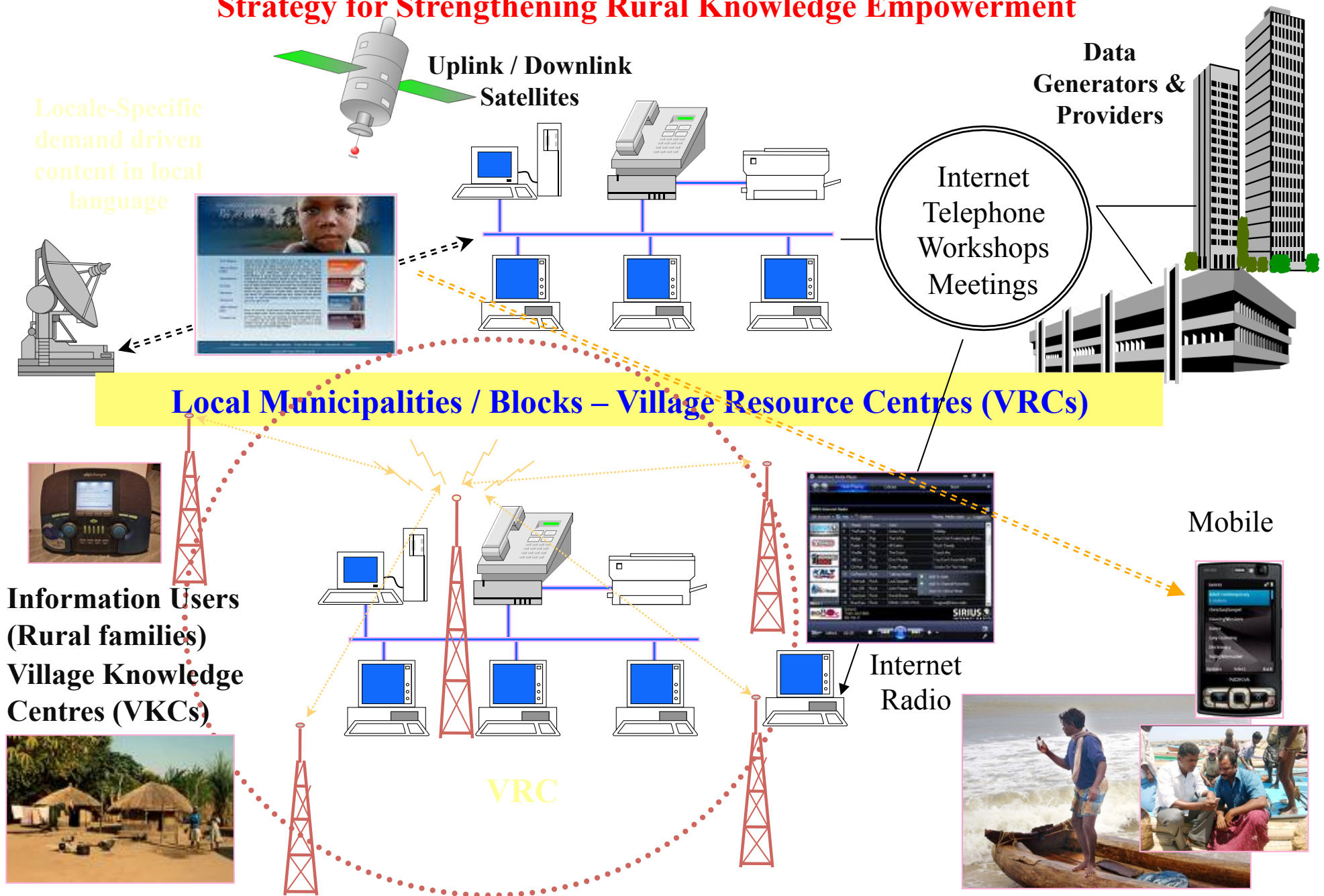
TRANSDISCIPLINARY RESEARCH PROCESS

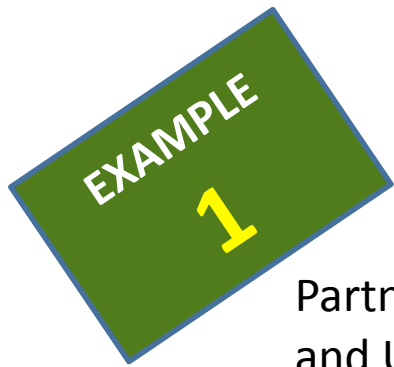
SCIENTIFIC PRACTICE



Reaching the Unreached: Voicing the Voiceless

Strategy for Strengthening Rural Knowledge Empowerment





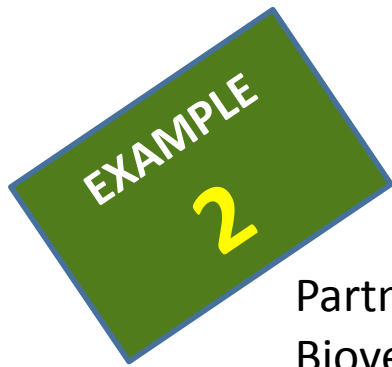
Leveraging Agriculture for Nutrition in South Asia-

LANSA 2012-2018

Partnership: multi-institutional consortium partners from South Asia, UK and USA, Bangladesh, Pakistan led by MSSRF

The LANSA consortium work to essentially address 4 Research Questions through frameworks for comparative analysis of agricultural and social systems

1. How can south Asian agriculture and related policies and interventions be designed and implemented to increase their impacts on nutrition, especially nutrition status of children and adolescent girls?
2. How can systems of Innovation that better connect agriculture and nutrition be nurtured?
3. Can we strengthen existing pathways to women's empowerment and identify new ones within the food system?
4. How can appropriate pro-nutrition agricultural policy frameworks for fragile and conflict-affected contexts be assured?



Alleviating Poverty and Malnutrition in Agro-

biodiversity Hotspots: **APM** 2011-2014

Partnership: multi-institutional consortium: University of Alberta, Bioversity International and MSSRF

Implemented in three Agro-biodiversity Hotspots

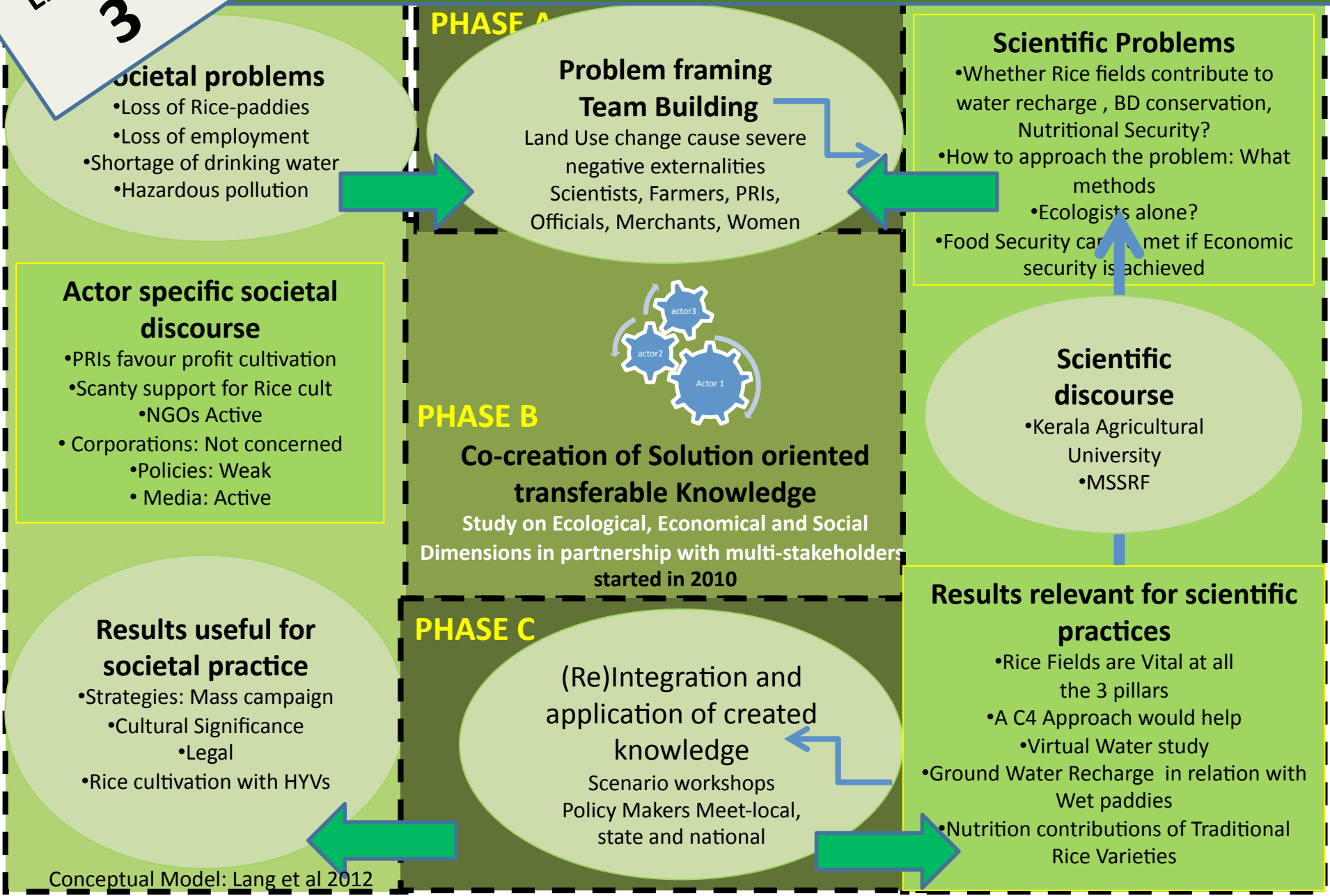
The innovative aspects:

- Research on an agricultural development strategy that integrates all local crop, livestock and other resources with concerted efforts on their concurrent conservation and sustainable use
- Research on participatory on-farm management
- Participatory approach to build leadership of local communities and grass root institutions, organizing women and men farmers into SHGs and Farmers Clubs
- Targeted interventions in addressing malnutrition through a malady-remedy paradigm that identifies major nutritional deficiencies
- High priority to social mobilization and empowerment of women to place them in driver's seat and energize efforts on alleviation of poverty and malnutrition.
- Participatory choice and adoption of gender sensitive and supportive technology and stress on TK, customs and practices

**EXAMPLE
3**

**TRANSFORMATION KNOWLEDGE TOWARDS A GENDER-EQUITABLE
SUSTAINABLE USE OF BIODIVERSITY (<http://www.biodiva.uni-hannover.de/>)**

University, Germany and Implemented in Wayanad district with leadership of MSSRF-CabC-GiZ & IFPRI as strategic partners



Some Larger Questions

1. How to build new innovations by synergizing Traditional Knowledge and Modern Science and a Apply it in a larger scale?
2. How best Gender principles and Practices can be integrated in Sustainable development Actions?
3. What best Incentives can offer to the people to adopt a sustainable living?



**THANK
YOU**

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