Is India a reluctant leader? SRI and research policy challenges

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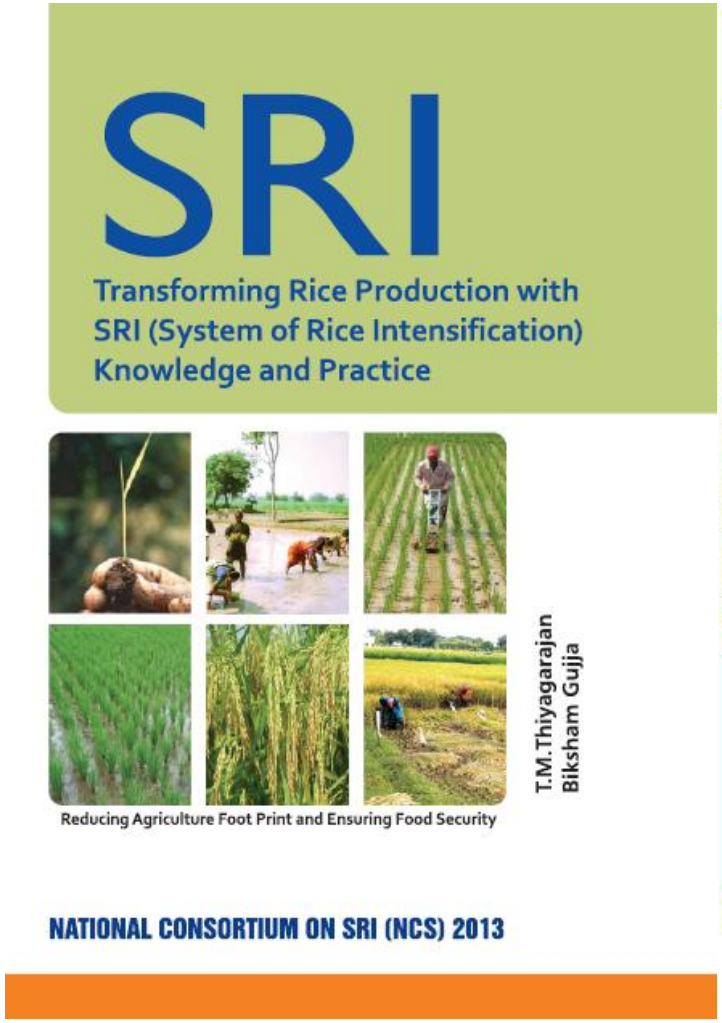
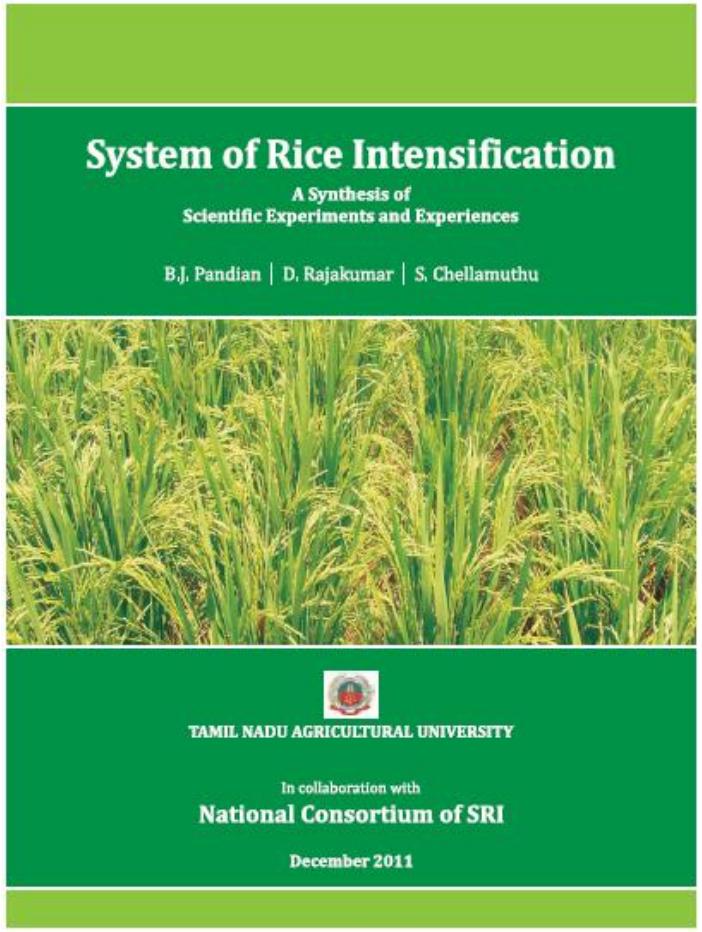
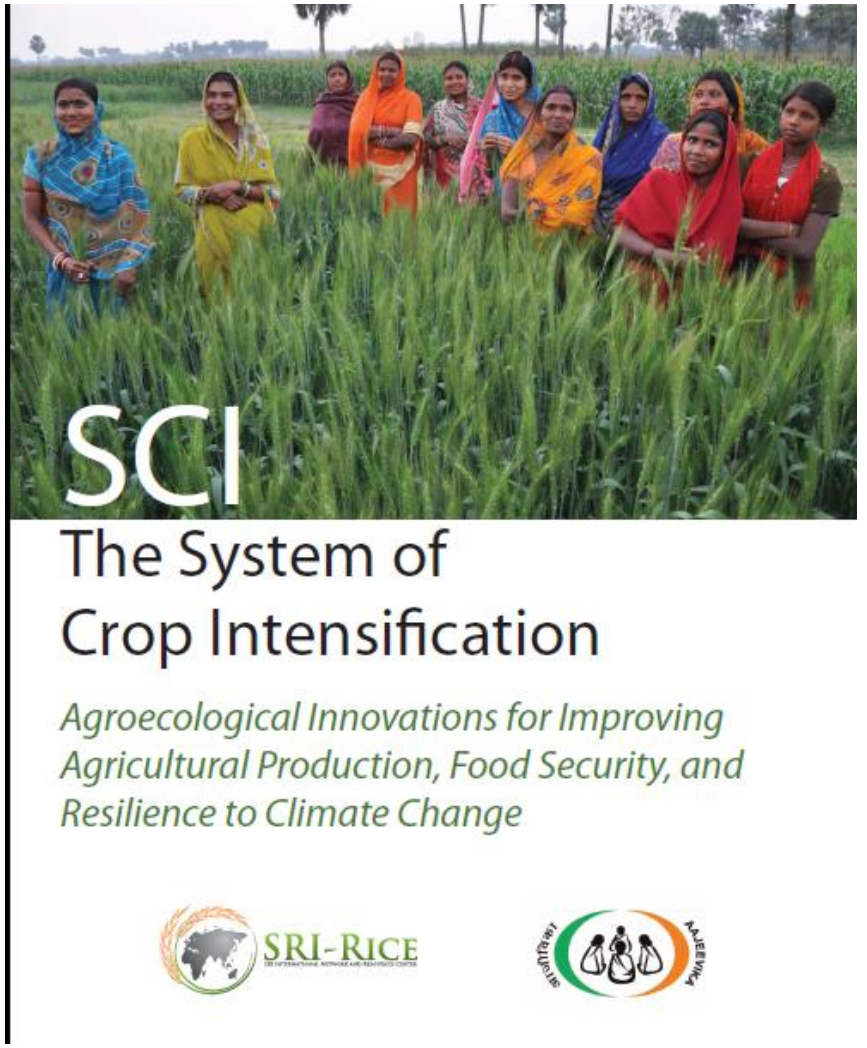
Some features of SRI in India

- Increased yields (11 – 40%). better soil health, savings seed, irrigation water (25-40%).
- SRI in India roughly 1.76 mill ha, 3.5 mill farmers
  - Modest to good (2% rice area) **despite** poor public investment (hybrid rice 6% after 25 yrs)
  - different institutional mechanisms, Extension not public/ private but **community-led**.
- Greater choice for farmers (good response from indigenous varieities), better adaptation to drought and climate change.
- Civil Society Organizations (CSOs) have leading innovation and incubation
  - Spread through networks, experiments in different crops, varieties, implements etc.
  - Women important roles often through community-based institutions in several states

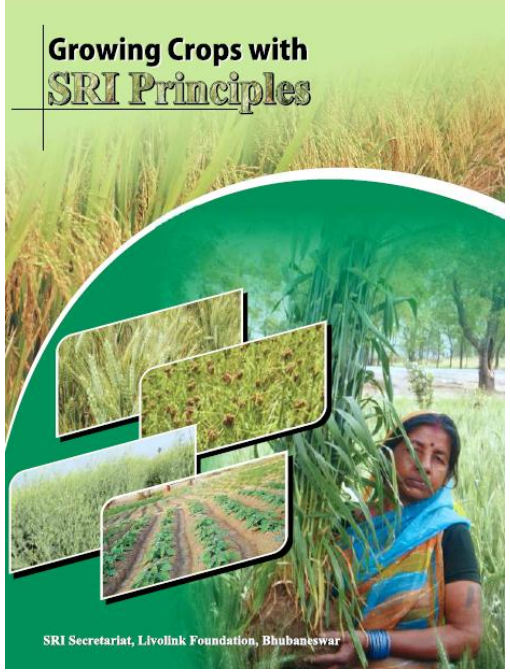
Implications for research policy – how should research actors work with others?

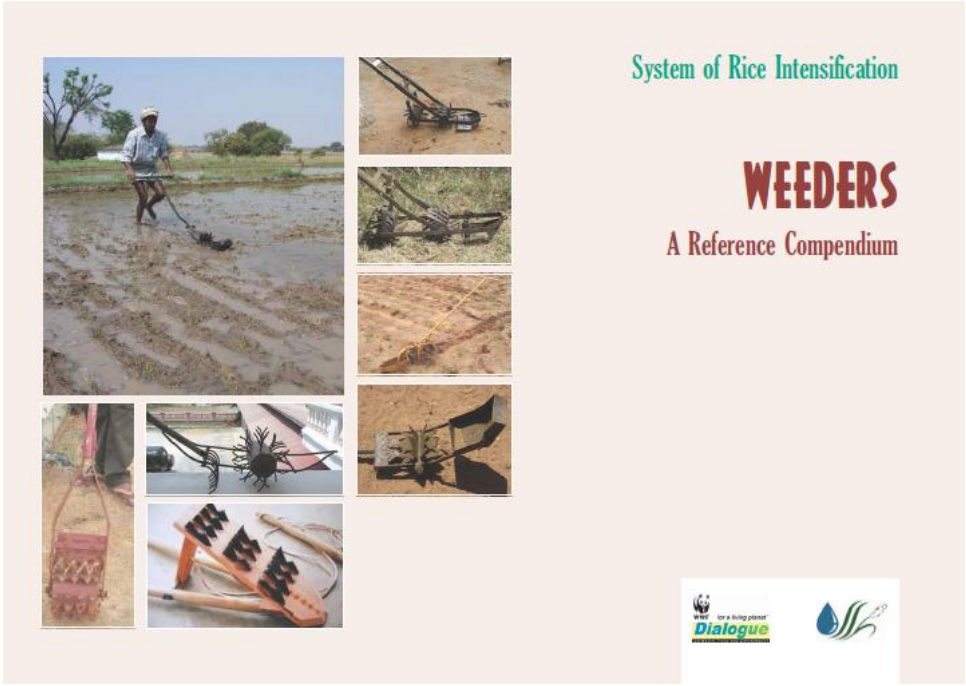


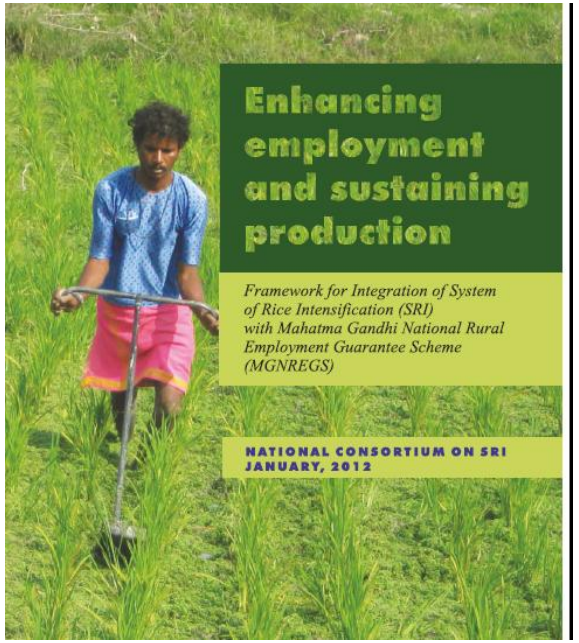


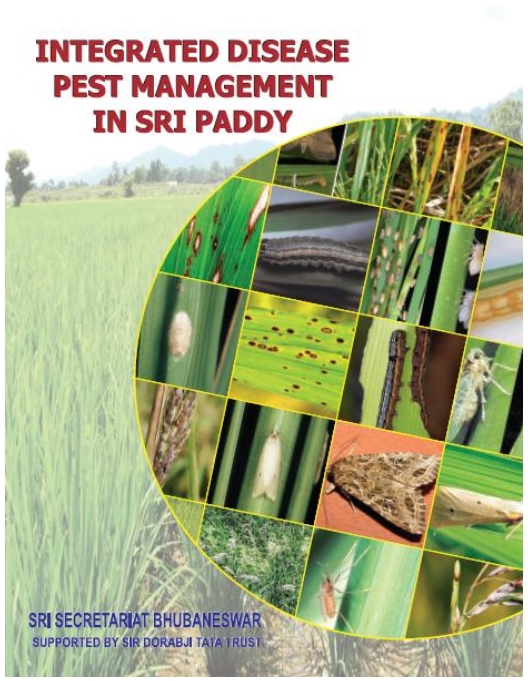


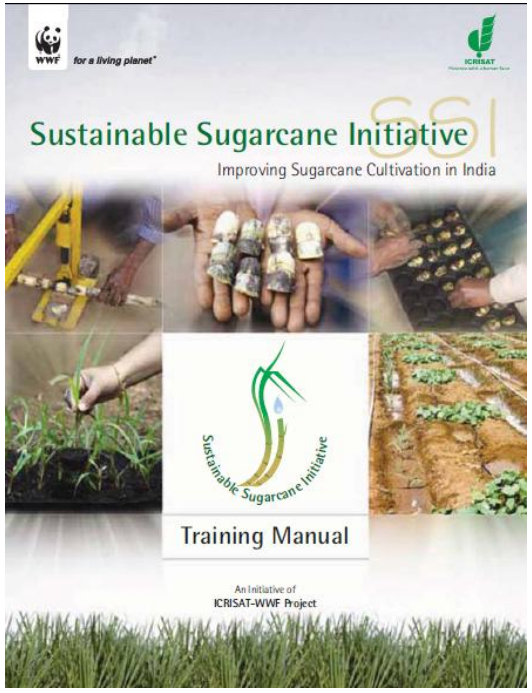
Knowledge on Science and Practice of SRI active outside formal research with researchers contributing… high demand

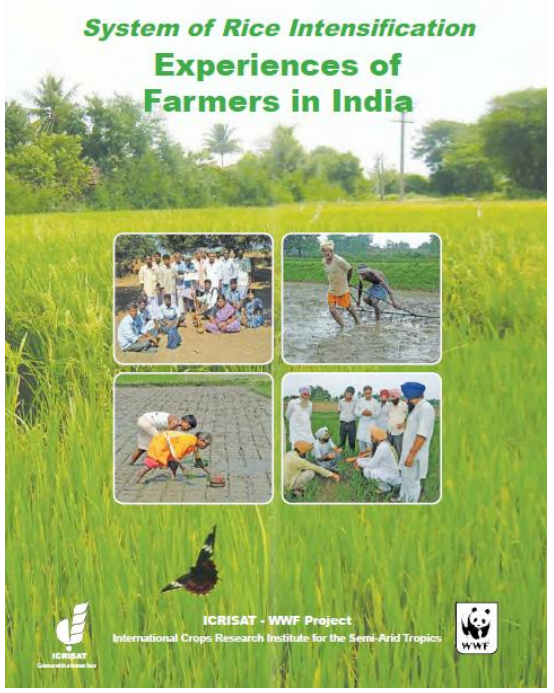

Growing Crops with
SRI Principles
SRI Secretariat, Livolink Foundation, Bhubaneswar

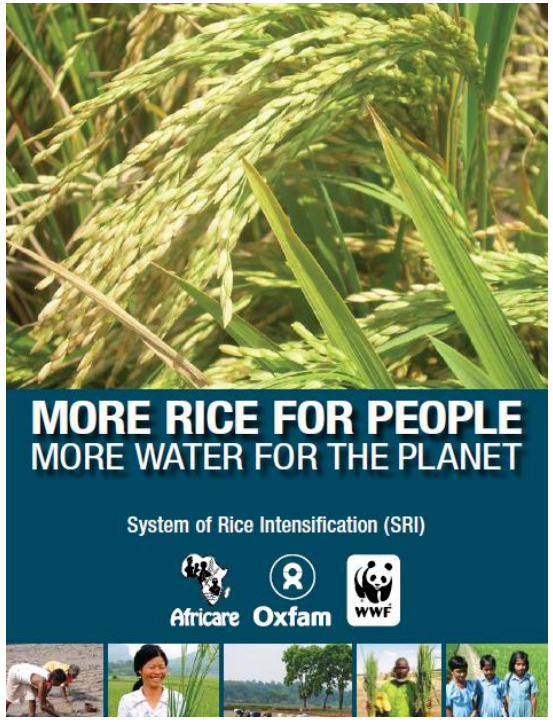

System of Rice Intensification
WEEDERS
A Reference Compendium
Dialogue


Enhancing employment and sustaining production
Framework for Integration of System of Rice Intensification (SRI) with Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)
NATIONAL CONSORTIUM ON SRI
JANUARY, 2012

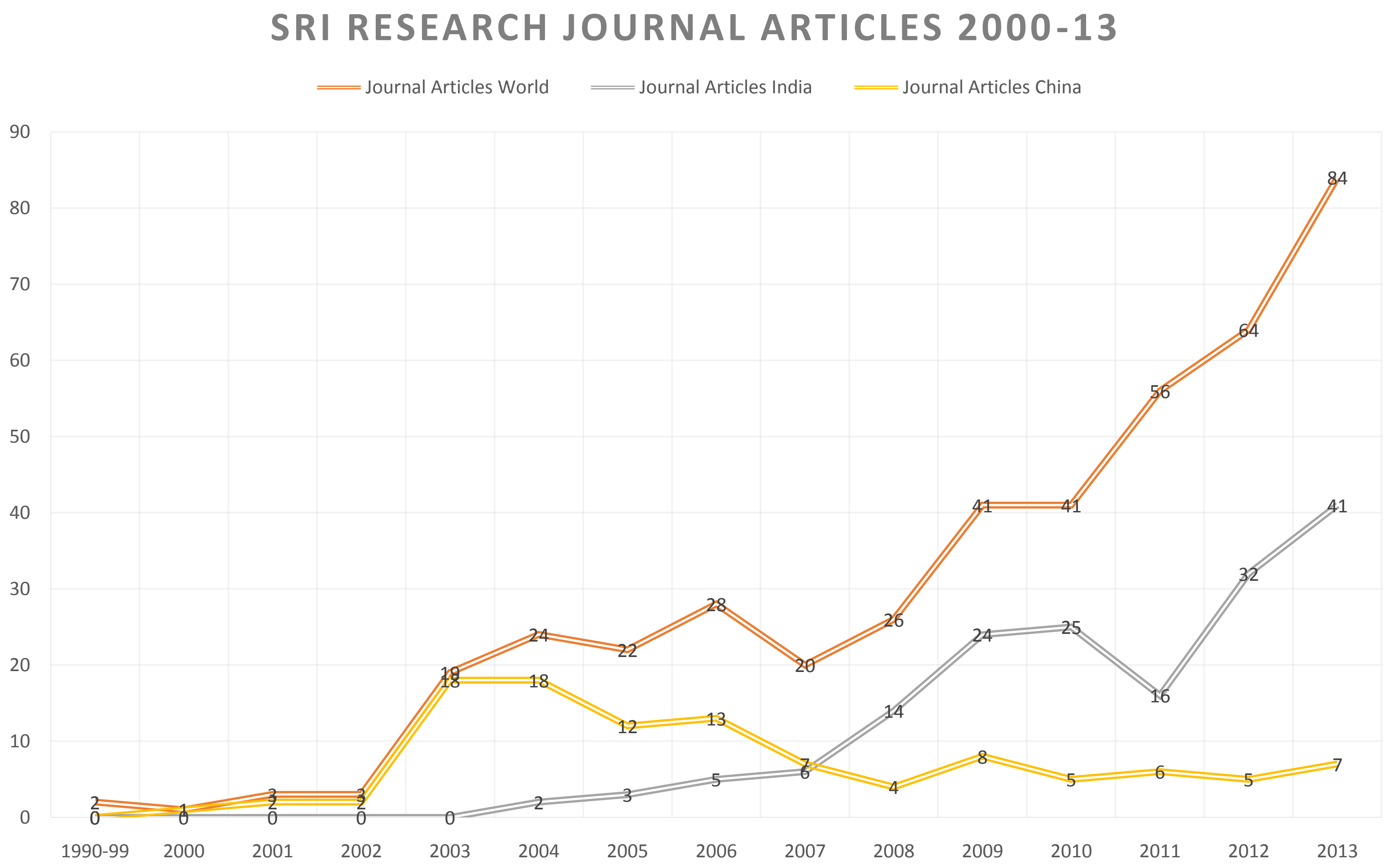

INTEGRATED DISEASE PEST MANAGEMENT IN SRI PADDY
SRI SECRETARIAT BHUBANESWAR
SUPPORTED BY SIR DORABJI TATA TRUST


for a living planet
Sustainable Sugarcane Initiative
SSI
Improving Sugarcane Cultivation in India
Training Manual
An Initiative of
ICRISAT-WWF Project


System of Rice Intensification
Experiences of Farmers in India
ICRISAT - WWF Project
International Crops Research Institute for the Semi-Arid Tropics


MORE RICE FOR PEOPLE
MORE WATER FOR THE PLANET
System of Rice Intensification (SRI)
Africare
Oxfam

India leading SRI research Globally



Overall > 38 % of all Journal articles from India

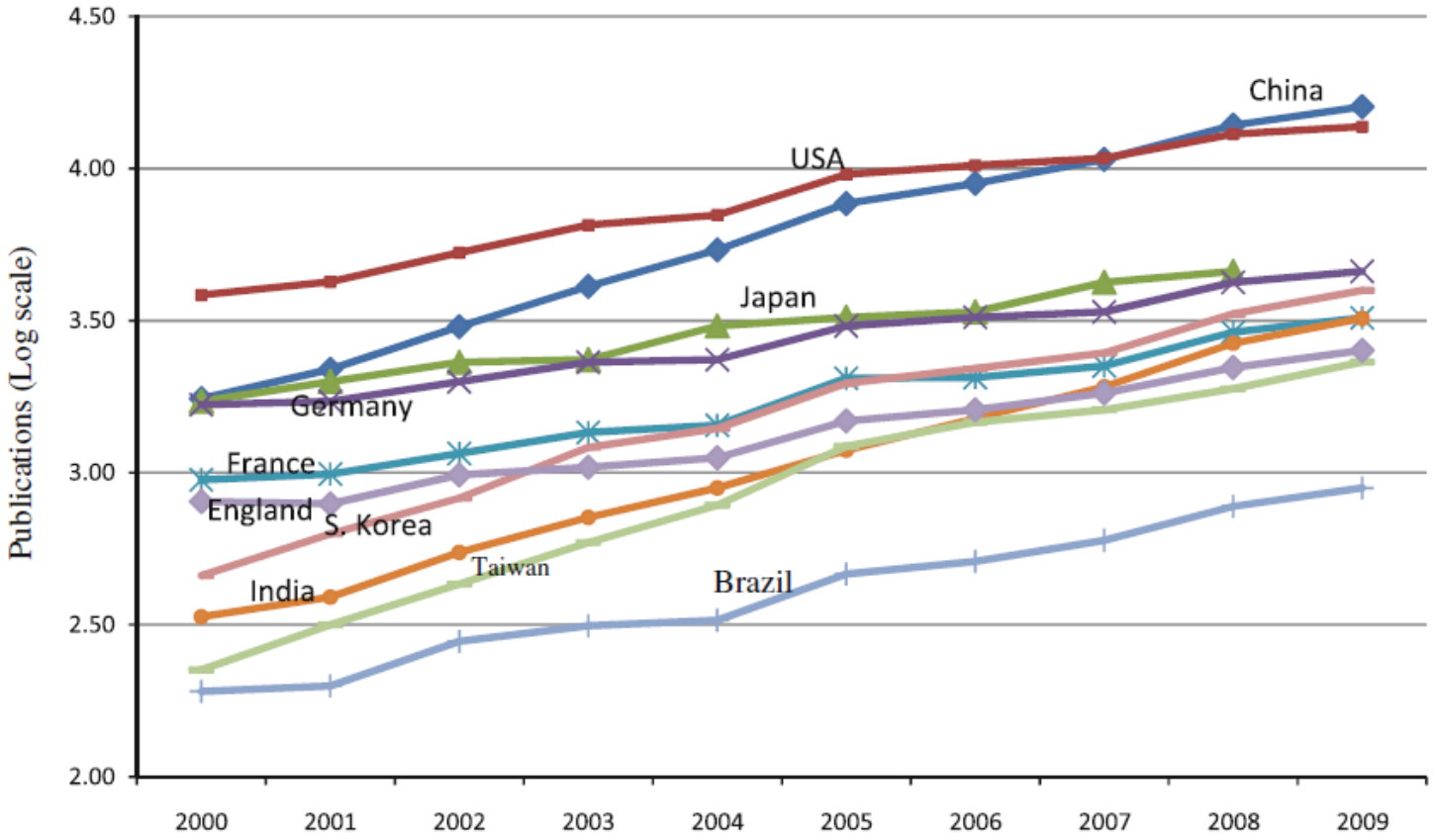
China and India contribute over 63% of all papers

China early lead until 2006

No journal articles from India until 2004

India dominates since 2007 (30 -60% overall)

Is this normal in Indian science ….Nanotech



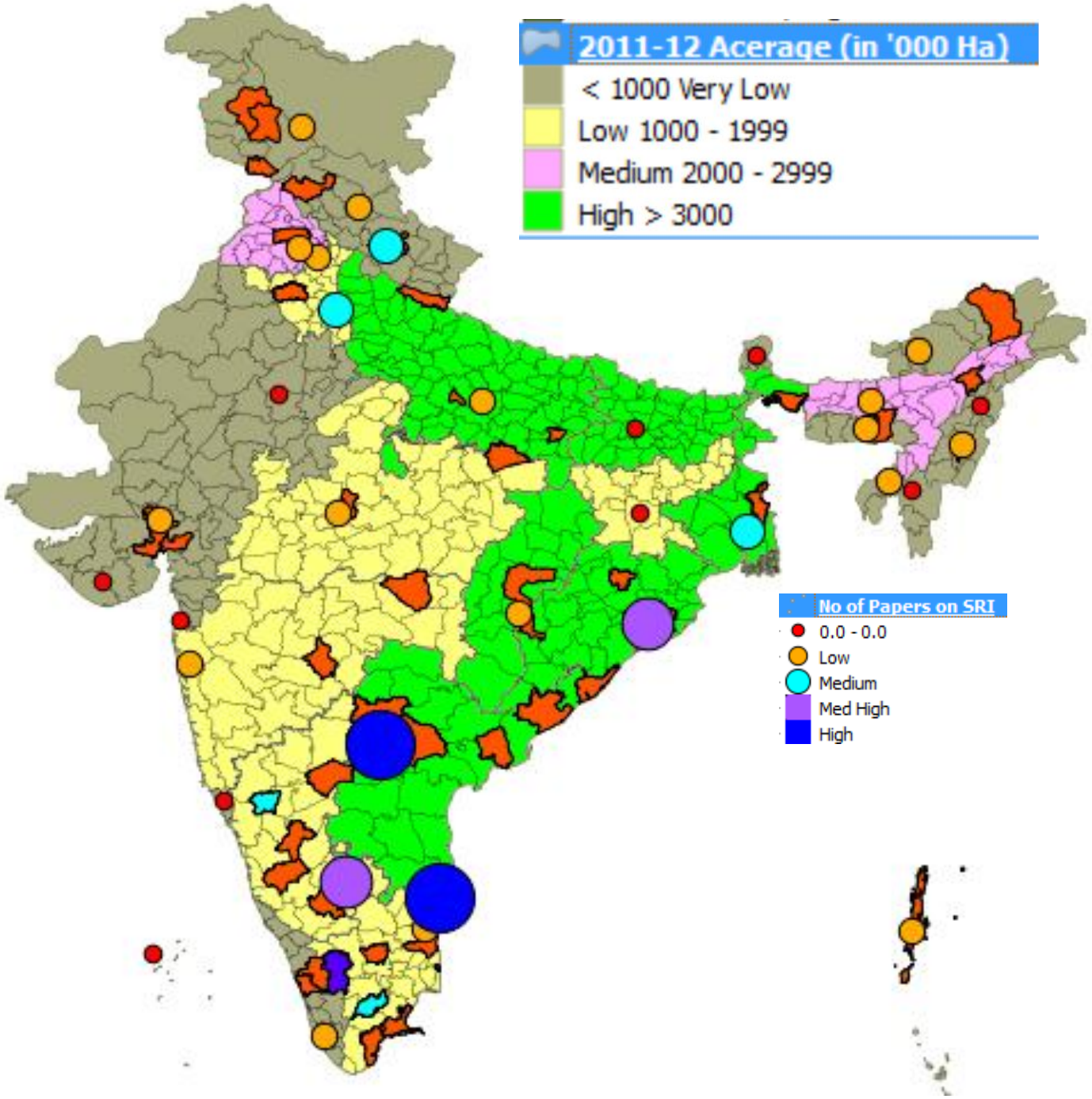
China 16.4% of total papers, India 3.4%

Chinese investment in nanotech 998 mill USD from 1990-2010

India's nanomission (2007) 250 mill USD

Bhattacharya, S., Shilpa, & Bhati, M. (2012). China and India: The two new players in the nanotechnology race. *Scientometrics*, *93*(1), 59–87.

GIS Map Indian SRI Research – state and District spread

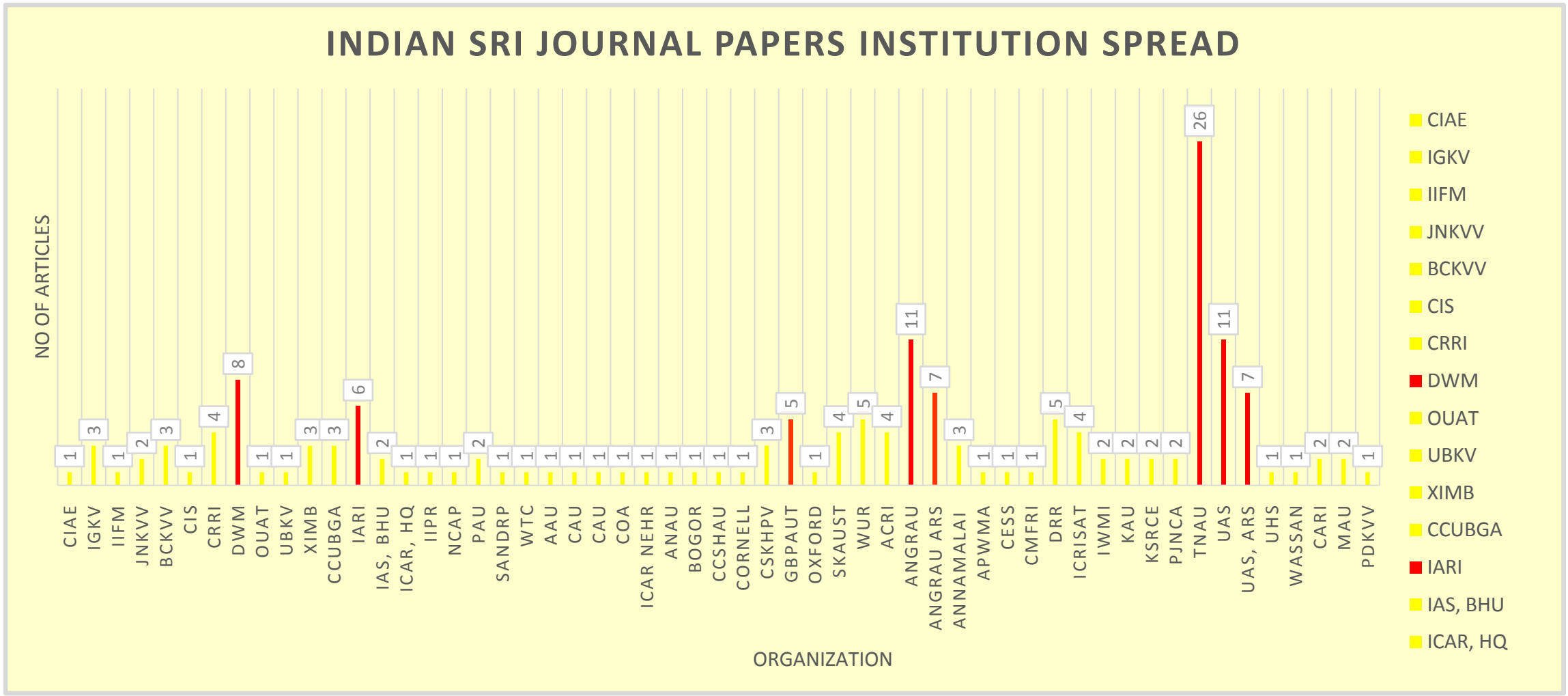


Notable omissions no research from Bihar or Jharkhand

Very low from key rice growing areas – UP, Chattisgarh, Punjab, Assam…..

SAUs in South active, rest doing little SRI research

Organizations Involved in SRI Research in India



Over 55 organisations (or groups for SAUs) involved in SRI research

Implications for research Policy

- India world leader by default, not design, in SCI research
- High potential for research
  - Ratio of journal papers (180)/ farmers (3.5 mill) very low
  - Little research in key states with high SRI presence
- Quality of research can be repetitive and poor if not connected with the larger research community on SRI
  - Few spaces to exchange and discuss, No ICAR event on SRI after a rich decade.
- Bigger challenge – researching differently (interdisciplinary teams, on farm) and working **with** others (Some examples – IARI-NCS),
- Can research management be done collaboratively? Case for greater investments in research