A modest comment on the need to develop institutional capacity in developing country agricultural research systems

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A festschrift in honor of Per Pinstrup-Andersen
• The rate and direction of technological change is determined by shifts in relative resource endowments and by institutional innovations

• Investing in agricultural research gives very high economic payoffs

• A plethora of great proposals to enhance the effectiveness of agricultural research institutions have been put forward (i.e. decentralization, separate funding from execution, private sector, universities, innovation systems, regional centers of excellence, etc.)
• We have been much productive in proposing research for development paradigms than in actually promoting the development of research capacities in developing countries!

• So, institutional change – including the development of capacities to improve the effectiveness and efficiency of research policies, research organizations and the management of agricultural research itself – has received very limited attention, particularly in the last two decades
• There appears to be a major imbalance in the priorities for funding public agricultural research in the less developed countries.

• How will we respond to the forthcoming colossal food security challenges without increased investment in social science research and institutional innovation capacity?
• Despite growing global investment in public agricultural research, many developing countries still do not have sufficient institutional capacity to manage priority research investments or even to ‘absorb’ technological spillovers from other countries.

• Capacity development is more than training and building labs. More institutional capacity needed in rethinking financing, organizing and managing public research.
• Strategic initiatives in international public research – such as the CGIAR – have assigned high priority to partnerships with national research systems in order to achieve research for development outcomes

• So, where are the partners?
• Overall investment in public research is increasing but there is a growing divide between a small number of countries performing relatively well and the rest

• About a dozen developing countries have strengthened their capacity (China, India, Argentina, Brazil, Mexico, Iran, South Africa, Nigeria, Uganda, Kenya, Thailand, Indonesia, Vietnam, etc.) but the other hundred or so lower income developing countries ‘invest’ less than 0.5% of AgGdp
• Total public spending in 2008 ~ $32B, half in more developed and half less developed countries
• China, India and Brazil ~25% of global spending and 50% of LDC
• All other developing regions accounted for 3-6% of global public spending each
• Private spending ~ $8B (20%)
• In SSA, half of the 30 countries where data is available have had spending declines or stagnated. The 2\textsuperscript{nd} and 3\textsuperscript{rd} most populated countries in the region have very low investment rates. DRC is spending 0.17\% of AgGdp ($16M) and Ethiopia 0.22\% ($78M). And 50\% of PhD holders are 50 years of age or older

• The CGIAR budget is growing but represents 1.5\% of total public spending or 3\% if high income countries are excluded
• Qualified researchers are an essential requirement for research organizations to perform, but ...

• The institutional framework in which researchers operate –sound policies, efficient organizations and skillful management- is just as critical for research impact