

Communication for Development in Research, Extension and Education

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A New Ball Game

‘Our yields were 0.8 tons of wheat, now they are 2.6. But those early sources of growth are no longer available. We now face problems of salinity, shortage of micro-nutrients, the lesser availability of water, pest resistance and resurgence and expensive fertilisers. Our task has become complex. We need to address these challenges and farmers must come along’.

Dr Naeem Hashimi, Pakistani wheat breeder and member of Pakistan Agricultural Research Council, Interview August 20, 2004

FARMERS FACE NEW CHALLENGES

- Climate Change
- Competing claims on natural resources
- Globalisation, price squeeze and competition
- Loss of resilience of (agro-) ecosystems
- Advance of technology
- Increasing livelihood needs
- Increasing exploitative pressure

Farmers hold most of the land and are the most numerous category. We need them to:

- Produce sufficient and safe food and fibre
- Restore biodiversity
- Restore hydrological systems
- Reduce poverty and terrorism enhancing inequities
- Create markets for our goods
- Participate in building a stable civil society

**An enormous
transformation is
required.**

**What models do we have
to make it happen?**

NO MODEL

Focus on agriculture as ‘harnessing the energy of the sun for human purposes’.

Inability to reason back from cubic meters of water or yields per hectare to human behaviour.

Purely technical natural science perspective.

Example: inability to see ‘active ingredient’ in IPM.

THE ECONOMIC MODEL

Farmers innovate when relative prices change.

Agricultural treadmill: farmers are compelled to adopt by the constant pressure on farm gate prices that result from efficiency gains (technological change) and inelasticity of demand for food

Farmers make rational choices

Autonomous diffusion of efficient technologies emanating from research and business

THE EXTENSION MODEL

Transfer of technology from expert to client

Science is the source of innovation, extension delivers

Focus on information, explanation, demonstration, publicity

Awareness, interest and conviction

Example: T&V provides a smooth conduit for messages between scientist and contact farmer

Diffusion to 'follower farmers'

These three models have led to dominant policies

- (1) Invest in technical agricultural research
- (2) Liberalise market, create an active agricultural treadmill
- (3) Transfer technology and expect its diffusion

THIS CONTRIBUTION IS IMPORTANT BUT

Its very success has led to second generation problems and threatens the ecological services on which human society depends.

Drinking water, biodiversity, (mental) health, stable hydrological systems, climate stability, pollination.

Obesity, degradation, desiccation, pollution, flooding, poisoning, farmer exploitation, marginalisation and stress in rural communities.

It is time to look at agriculture in a wider (systems) perspective

It is time to

- Shift from technology push and expert knowledge to co-creation of knowledge and empowerment
- Allow farmers to become partners in making choices.
- Recognise that developing farmers' countervailing power is fastest route to rural development

THE FARMER EDUCATION MODEL

- Focus on building competence
- Provide a framework with which to infer from observation, anticipate, assess and evaluate
- Understand other people's world views and narratives
- E.g., Denmark, Holland, US consider research, education, and extension 'the three essentials'
- Ignored in Millenium Development Goals

THE AKIS MODEL

- Theatres of innovation with multiple potentially complementary actors (but usually a mess)
- Innovation can only emerge from their interaction and synergy
- Focus on fomenting synergy and on transforming messes into systems
- So far especially in high value export products and includes chain partners

THE PARTICIPATORY MODEL

- PRA, PTD, PLA, etc.
- Respect for rural people: adult, expert, proud, competent, know what is best for them
- Not component technologies but farming systems
- Indigenous knowledge
- Farmers are researchers and live by the results
- Involve them in their own development
- Widely tested methodologies available
- Hardly affected hard-core agriculture

FARMER FIELD SCHOOL MODEL

- FAO's own star contribution
- Hidden in Crop Protection and not widely recognised as 'active ingredient' in IPM
- Proven impact on small farmers (including disadvantaged women)
- Yields, reduction pesticide use, incomes, empowerment, discovery learning, entrepreneurial activity, and claim making on e.g., research
- Still many risks and vulnerabilities when scaled up
- Recognised by policy makers

AND FINALLY: SOCIAL LEARNING MODEL

- Multiple interdependent stakeholders make competing claims on limited resources
- Technology, regulation and market ineffective
- Sustainable use of natural resources from negotiated agreement among the stakeholders
- Facilitate social learning and agreement in multiple spaces for learning at multiple scales
- Common Property Resource Management
- Watershed management

CONCLUSIONS (1)

- Promising options for addressing challenges
- Key ingredient: translation of technical issues into social process and vice versa: niche for FAO
- No recognised discipline or department
- Science and economics cannot 'see' it
- FAO: petty competency struggles
- Donors blind (e.g., EU sector-wide approaches, refusal to fund 'agriculture')

CONCLUSIONS (2)

- Challenge and opportunity to develop our profession
- Models not exclusive but complementary
- Different 'models' need to be integrated and experimentally developed into a versatile interface between rural communities on the one hand and public and private agents on the other

A Recalcitrant Context: West Africa

- Farmers are (very) innovative...
- But not in terms of productivity per ha
- Lack of farmer countervailing power
- Lack of supportive institutions
- (Local) Treadmill not operational
- Ways in which farmer wealth is creamed off

Our challenge:

- Farmers have veto power: listen!
- Farmers have little negotiating power: help them empower themselves!
- Innovation emerges from interaction among multiple (chain) actors: facilitate it!
- Innovation requires framework conditions: help create them!

THANK YOU FOR YOUR ATTENTION

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