PARTNERSHIPS, FARMER PARTICIPATION AND CONSERVATION AGRICULTURE

INITIAL EXPERIENCES AND LESSONS FROM THE BAJIO (MEXICO)

Is it possible to coordinate the strategies and actions of multiple actors around the common goal of developing and diffusing Conservation Agriculture (CA) practices? How crucial is farmer participation in these efforts? How much of an emphasis should be placed on CA technologies vs. other types of innovation and institutional reform?

The initial steps of the ASOSID project provide partial answers to these questions in the context of the Bajío, a semi-arid, subtropical region of Central Mexico dominated by post-green revolution, highly productive irrigated small-scale farming, presently facing decreasing availability of irrigation water and soil fertility degradation.

Pre-2001 efforts to foster No-Tillage adoption

- Started in the 70s (FIRA, 1997), efforts included development and evaluation of No-Tillage technological packages, demonstration plots in farmers’ fields, training of extensionists, creation of a manufacturing capacity for No-Tillage seed drills, and government subsidies for purchase of these drills, among others.
- By 2000, No-Tillage adoption had reached 40% of Bajío farmers (Joubert et al., 2001). Adoption was partial since No-Tillage was being used only for summer crops, and residue burning or baling remained the norm.
- Obstacles for further adoption included inadequate residue management, poor access to No-Tillage seed drills, lack of training / technical assistance to farmers, lack of coordination among entities promoting No-Tillage and low levels of involvement of farmers and farmers’ organizations.

Launching of ASOSID

ASOSID: Agricultura Sostenible en base a Siembra Directa (No-Tillage based Sustainable Agriculture)

Initial objectives of ASOSID

Get Bajío farmers to develop, adopt and adapt NT-based technologies, with the active support of external institutions.

Principles:
- Inter-institutional (Table 1), Research and Development, Participatory Development of Innovations (PDI).

Initial activities of ASOSID

Training of project staff, establishment of commercial / demonstration plots, experiments with farmers-innovators, launching of on-station “mega-experiment” on NT systems.

Difficulties & Problems

Institutionalization

^ Formal non-profit NGO created 11/2002 (Table 2):
- Strong leadership of state government;
- Hiring of full-time manager and technical staff, increased public funding, major priority given to large-scale NT diffusion, restricted space given to research & PDI, all research conducted on-farm and linked functionally to diffusion activities.
- Major role for Farmers’ organizations:
- Hiring & assigning staff to ASOSID, buying NT seed drills & contracting them out, playing an active role in diffusion, member of the Directing Board of ASOSID.
- New, modest role for research organizations:
- Simple service providers of adapted & adaptive research.

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General principles

- Creating a common platform and vision among diverse stakeholders.
- Active involvement of farmers and their organizations.
- Initial role and need for a “neutral” catalyzing role.
- CA technologies must provide genuine solutions to priority, explicit needs of farmers.
- Innovation has to go beyond the usual technological agenda and include socio-organizational aspects.

Concluding Comments

ASOSID is still very young and will keep evolving over the next few years until it finds its niche in the region.

Research can and should play a key role in the development and eventual success of CA, and also in strengthening the capacity of other regional actors to innovate in a fast-changing environment.

Inter-institutional collaboration is complex; it can be successful if and when key stakeholders accept to engage in constant, frank, mutually beneficial negotiations to overcome unavoidable conflicts.

There is a need for farmers to be given (or to size) from the beginning a leading role in the design and implementation of such programs.

References


Table 1: Key No-Tillage (NT) actors in the Bajío.

<table>
<thead>
<tr>
<th>Entity</th>
<th>Main mandate</th>
<th>Formal member</th>
<th>Ag. Loans, Subsidies</th>
<th>Ag. Loans, Subsidies</th>
<th>Ag. Loans, Subsidies</th>
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<tbody>
<tr>
<td>SDA (Min Guanajuato)</td>
<td>Ag. Development, Ag. Policies</td>
<td>No</td>
<td>Program leader, funding</td>
<td>Program leader, funding</td>
<td>Program leader, funding</td>
</tr>
<tr>
<td>SRL – Do 001</td>
<td>Water Quality</td>
<td>Yes</td>
<td>Extension, NT promotion, teaching of NT sustainabil</td>
<td>Yes</td>
<td>Extension, NT promotion, teaching of NT sustainabil</td>
</tr>
<tr>
<td>CIRAD-CIMMYT</td>
<td>Agricultural Research</td>
<td>Yes</td>
<td>Participation development of NT technologies</td>
<td>Participation development of NT technologies</td>
<td>Participation development of NT technologies</td>
</tr>
<tr>
<td>DNSEP</td>
<td>National Agricultural Research</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FUNPA</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INIFAP</td>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td></td>
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<tr>
<td>Mesoamerica-Mexico</td>
<td></td>
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<td>Yes</td>
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Table 2: Phases of the ASOSID project

<table>
<thead>
<tr>
<th>Phase</th>
<th>1: Transfer of NT technology</th>
<th>2: Birth of ASOSID</th>
<th>3: ASOSID institutionalized</th>
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</thead>
<tbody>
<tr>
<td>Duration</td>
<td>End of the 90s - 2000</td>
<td>2-2001 to 10-2002</td>
<td>10-2002 to present</td>
</tr>
<tr>
<td>Leader</td>
<td>FIRA</td>
<td>CIRAD-CIMMYT</td>
<td>SDA</td>
</tr>
<tr>
<td>Other key actors</td>
<td>DNSEP, SDA, Private Sector</td>
<td>SDA, SRL, INIFAP, PRA, Monetario</td>
<td>SRL, FIRA, CIRAD-CIMMYT</td>
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<tr>
<td>Relationships other actors</td>
<td>None or bilateral, based on correspondence &amp; personal contacts</td>
<td>Informal through periodic stakeholder meetings</td>
<td>Formal (creation of a formal NGO among key stakeholders)</td>
</tr>
<tr>
<td>Main focus</td>
<td>Technology development &amp; evaluation, Training of NT advisors, demonstration plots</td>
<td>Participatory Technology Development, Staff Training, Project structuring</td>
<td>Participatory Technology Development, Staff Training, Project structuring</td>
</tr>
<tr>
<td>Model of diffusion</td>
<td>Top-down Technology transfer, farmer-to-farmer</td>
<td>Participatory, farmer-to-farmer</td>
<td>Hybrid (farmer-to-farmer)</td>
</tr>
<tr>
<td>Impact</td>
<td></td>
<td>Organizational Innovation</td>
<td>Not yet (or cycle only)</td>
</tr>
</tbody>
</table>

Typical Bajio landscape before the winter cycle.

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