ANEP RESULT 1: INCREASED PRODUCTIVITY FOR SMALLHOLDERS

The Challenge

In Bangladesh smallholder farmers often lack access to improved agricultural technologies due to weak linkages between research systems and extension systems and the private sector. Introducing carefully selected innovative, affordable, and environmentally sustainable agricultural technologies can increase the productivity of farmers and also enhance the nutritional value of their produce.

The Goal

ANEP’s goal was to increase the productivity of target smallholder farmers by facilitating the transfer and sustainable adoption of agricultural technologies. In particular, the project aimed to improve their access to profitable, environmentally sustainable and socially adapted agricultural technologies in the vegetable, fisheries, and field crops (maize, wheat, rice, and legumes) sectors. Key activities included:

1. Mobilizing farmers in informal business-oriented producer groups.
2. Facilitating production and sales strategies for the smallholders by bringing them together with private sector actors.
3. Demonstrating productivity-enhancing technologies through relevant private sector actors.

ANEP was able to mobilize some 268 target production groups (against the targeted 250).

ANEP created market linkages that increased income and improved the welfare of individual small businessmen.

ANEP enabled local service providers to expand their profits and create new areas of potential profit for their communities while improving food security.

ANEP increased merchant profit while increasing the availability of nutritious food in underserved urban slum markets.

Consortium Partners

The Agriculture and Nutrition Extension Project (ANEP) is a partnership between International Development Enterprises (iDE), World Fish, CIMMYT, IRRI, Save the Children International, CODEC, CEAPRED and BES and is funded by the European Union (EU). The project seeks to sustainably raise agricultural productivity and promote effective market linkages to improve the nutrition of poor rural and urban households in the south of Bangladesh and the Nepal plains.
The ANEP believes that greater inclusiveness for smallholder farms is dependent upon intensified business-to-business relationships with established commercial actors. ANEP mobilised farmers into producer groups that improved farmers’ collective decision-making and helped them procure quality inputs, access production technologies, and sell outputs in a participatory, sustainable manner. Relationships and activities ANEP facilitated include:

- **Production and Sales Planning Meetings.** ANEP worked with private sector actors to demonstrate the value of technologies to the producer groups, providing a promotional point and route to market for technology suppliers and establishing trusting relationships which underpin the sustainability of new commercial linkages.
- **Mechanization and technology adoption.** ANEP worked with local service providers to develop market and enterprise approaches and plans for new technologies and markets.

### ANEP Introduced Technologies

#### Vegetable Sector
- Off-season producing varieties and technologies
- Improved compost through vermi-compost production
- Integrated pest management minimizing pesticides e.g. sex pheromone traps (SPT)
- Nutritious vegetable varieties

#### Fisheries Sector
- Carp poly-culture
- Nutrient-rich small fish which are eaten whole
- Integration of vegetable production on pond dykes

#### Field Crops Sector
- Minimum tillage to improve soil quality, water use, and yields while reducing labour
- Bed planting, direct seeding, and fuel efficient irrigation using mechanised services
- Decision tools for soil fertility management
- Higher yield, stress tolerant, higher nutrition legumes
- High protein maize
- Low-cost seed storage technologies

### Intensification of Business-to-Business Relationships

<table>
<thead>
<tr>
<th>Input Market Actors</th>
<th>Rural Producer Groups</th>
<th>Local Service Providers</th>
<th>Output Market Actors</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Business plans, seasonal production plans, collaborative technology purchases</td>
<td>Buy and sell harvest, learn about agri, demand-side information</td>
<td>Reducing bugging, selling, fertilizing, agro-pest, agronomic advice training, etc.</td>
<td></td>
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</tr>
</tbody>
</table>

### ANEP LINKAGES

1. ANEP facilitates the group's access to OMAs as they bring market information—enabling the producers to know what crops to choose for their production needs.
2. ANEP then works with OMAs to extend improved inputs to the groups, supporting companies to demonstrate and sell their products...
3. ANEP further supports the groups to have access to CSLPs, particular providers of labour-saving and productivity-enhancing technology services.

### Lessons Learned

Build project staff capacity to focus on the market beyond the beneficiaries and take a creative approach.

ANEP front-line staff were encouraged to think critically about the local market and create a ‘vision of change’ for what they wanted to achieve. They were supported to conduct assessments of the local market context for key commodities using IDE’s Bigger Picture Training methodology. This contributed to the project’s success in increasing the competitiveness of the whole market system rather than just the direct beneficiaries.

Ensure the project is led from the field by providing the team with the tools and responsibilities to drive it.

ANEP field operations were managed from Barisal through a field management team seconded from the partner organisations, with strategic support from an overall project management committee in Dhaka. This structure enabled tactical decisions regarding field activities to be made locally. As an example, ANEP was able to facilitate access to relevant local service providers in response to demand side information elicited from small-holder production plans.

### Key Results

The specific objective for Result 1 was to increase the productivity and incomes of small-holders by introducing and facilitating the adoption of productive and environmentally sustainable agricultural technologies to improve their livelihoods.

**Impact of the Project**

It was found that ANEP had a significant impact on beneficiary households. Twenty percent more beneficiary households achieved a €75 increase in cash income and consumption equivalency than did control households, and productivity of key nutritious foods such as vegetables, fish, and field crops increased by an average of 35% against the control group.

### Summary of ANEP Achievement Against Expected Result 1 Indicators

<table>
<thead>
<tr>
<th>Indicator 1: Poor Target HH With Increased Income of EUR75/year</th>
<th>Indicator 2: Productivity of small-holder farmers increased Kg/Decimal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>Beneficiary Group</td>
<td>Control Group</td>
</tr>
<tr>
<td>79%</td>
<td>59%</td>
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</tr>
</tbody>
</table>

### Effectiveness of the Project*

ANEP’s effectiveness against Result 1 has been evaluated as highly satisfactory. The effectiveness of the project was assessed based on whether the productivity of beneficiaries was increased by improved access to profitable, environmentally sustainable and socially adapted technologies. It was found that in all cases the project met and often significantly exceeded its target indicators.

<table>
<thead>
<tr>
<th>Field Crops Sector</th>
<th>Target</th>
<th>Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH is member of a well-functioning group that is likely to continue as group with new technologies after ANEP</td>
<td>75%</td>
<td>100%</td>
</tr>
<tr>
<td>HH practices at least one sustainable vegetable production technology</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>HH practices at least one sustainable cereal and legume production technology</td>
<td>75%</td>
<td>80%</td>
</tr>
<tr>
<td>HH practices at least one sustainable aquaculture technology</td>
<td>75%</td>
<td>93%</td>
</tr>
</tbody>
</table>

*Data collected by an independent consultant and current as of December 2, 2014. Study can be provided upon request. Field crop data considers pulses and BRRI 39 only as there was no baseline data for wheat and maize. Fish productivity achieved significantly higher increases against original baseline. Data presented is for the control group only.