Schools as climate-smart agriculture information hubs

Jaime A. Manalo IV, Myriam G. Layaoen, Katherine P. Balmeo, Jayson C. Berto, Christina A. Frediles, Fredierick M. Saludez
The Project:
Development and roll-out of climate-smart rice farming module in the Infomediary Campaign-participating schools in the Philippines
Objectives

• To test the effectiveness of mobilizing the students to deliver information on climate change to farmers in their community
• To create new communication pathways in delivering climate change information to farmers
• To identify factors that will get in the way of successful implementation of this initiative
Methodology

Survey

Focus Group Discussion

Snowballing
SCHOOLS

- Balagtas Agricultural High School (BAHS) Balagtas, Bulacan
- Ilocos Norte Agricultural College (INAC) Pasuquin, Inorte
- Partido Agro-Industrial National High School (PAINHS) Tigaon, CamSur
- Libon Agro-industrial High School Libon, Albay
- Tacloban National Agricultural School (TNAS) Tacloban, Leyte
- Dingle National High School (DNHS) Dingle, Iloilo
- Valeriano C. Yancha Memorial Agricultural High School (VCYMAHS) Basey, Esamar
- Southern Samar National Comprehensive High School (SSNCHS) Balangiga, Esamar
- Sindangan National Agricultural High School (SNAHS) Sindangan, Zambo del Norte
- Malalag National High School (MNHS) Maitum, Sarangani
- Agusan Pequeno National High School (APNHS) Butuan City, Agusan del Norte
- Cateel National Agricultural High School (CNAHS) Cateel, Davao Or.
Activities implemented
Training of teachers on climate change and rice production module
Distribution of communication materials
Integration of the module in the school curriculum
Random conduct of Infomediary Quiz Bee
Establishment of rice gardens
Monitoring and evaluation
Results

Perception on climate change (Average percent change)

- Salinity and seawater rise: 14.94%
- Typhoon and flood: 10.14%
- Drought: 6.92%
- Increase in temperature: 4.31%
- End of the world: 0.08%

*Significant positive change in all phenomena, and negative on “end of the world”*
Results

Sources of information on climate change

- Use of comm channels in different context
- Preference to easy-to-use channels
- Support for internet-based platforms
- Value of face-to-face comm
Results

CSA topics taught in class and shared

<table>
<thead>
<tr>
<th>Topic</th>
<th>Taught</th>
<th>Shared</th>
</tr>
</thead>
<tbody>
<tr>
<td>General information, causes of CC</td>
<td>350</td>
<td>250</td>
</tr>
<tr>
<td>Effects of CC on rice production</td>
<td>350</td>
<td>250</td>
</tr>
<tr>
<td>Mitigation</td>
<td>300</td>
<td>200</td>
</tr>
<tr>
<td>Adaptation</td>
<td>250</td>
<td>150</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*More emphasis on general information*
Results

On managing climate change impacts on rice (Ways to manage CC on rice)

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>85.8%</td>
<td>Planting the right varieties</td>
</tr>
<tr>
<td>79.1%</td>
<td>Paying careful attention to land preparation technique</td>
</tr>
<tr>
<td>83.0%</td>
<td>Applying right amount of fertilizers</td>
</tr>
<tr>
<td>87.1%</td>
<td>Proper water management</td>
</tr>
<tr>
<td>71.1%</td>
<td>Proper pest management</td>
</tr>
<tr>
<td>83.0%</td>
<td>Meticulous planning of field activities</td>
</tr>
<tr>
<td>79.6%</td>
<td>Ensuring that all field tools are environment-friendly</td>
</tr>
<tr>
<td>83.5%</td>
<td>Active search on CSA information</td>
</tr>
</tbody>
</table>

*Knowledge on how to manage CC impacts is there.*
Information flow in the infomediation process

Ask the teachers

Verify

Discuss with other farmers

Dismiss

Practice

Text the PTC

*REINFORCEMENT
Students should not only share technical knowledge, but the campaign as well.

Need for reinforcement mechanisms.
New communication pathways to deliver CC information

1. Classroom discussions
2. Parent-teacher meetings
3. Collaboration with local government units
4. Publishing of CSA technologies in school papers
5. Infomediary corners
6. Across subject integration
7. Promoting the campaign to other schools
8. Information drives in nearby communities
9. Situating the rice garden near farmers’ fields
Factors that may hinder successful implementation

- Failure to re-echo and turnover the KPs given during the training
- ICT infrastructure issues
- National certificate from Technical Skills and Development Authority
- Admin issues and ground politics
- Site-specific issues
Policy recommendations

- Mainstream climate change in school curriculum
- Develop reinforcement mechanisms to increase credibility of students
- Explore potential mechanisms for face-to-face communication and ICT-based media
- Engage non-technical vocational schools for wider impact