**TRIP REPORT**

*July 25 – August 3, 2016*

*Michael Carter, Melanie Chen, Tara Steinmetz*

**OVERVIEW**

The primary accomplishments emerging from the July-August trip to Nepal by representatives from both the AMA Innovation Lab and Freedom From Hunger are as follows:

1. Refinement of the VISA Model;
2. Identification of probable partners for implementation of the VISA Model; and
3. Proposal of an alternative application of the government’s subsidy for agricultural insurance.

The first part of this report will review the work that has taken place on this project to date, as well as to review what led to the recommendation of an area yield-based index insurance pilot for rice farmers in the Terai. This report then states the objectives of this trip, and lists with some brief details the meetings organized.

Finally, this report offers greater detail on our recommendations for both the refined VISA Model (page 6) and the recommended alterative application of the government subsidy for agricultural insurance (page 8).

**PROGRESS TO DATE**

In an initial feasibility study, BASIS/I4 conducted an investigation to find the intersection 1) where the development impacts of an insurance-based risk management strategy would be maximized, and 2) whether there is appropriate and available data that could be used to create an effective index for an insurance product.

Based on this initial work, we determined that the insurance for rice in the Terai had the greatest potential for development impact and success. This is both a commodity and a region where insurance has the potential for significant impacts by crowding in new investment and prudential risk-taking by small-scale farms, enhancing opportunities for growth.

After determining our target area and commodity, we tested a variety of external measures, including both rainfall and satellite-based measures, to see if they could be used effectively for implementation of an index insurance contract. Unfortunately the analysis indicated that none of these external measures were sufficiently correlated with farmer experiences on the ground such that they would be able to serve as an effective index for an insurance product.

Using data we collected in the Terai, we then tested the feasibility of an area-yield based insurance. Area yield-based insurance has the greatest potential to be able to predict farmer outcomes, as it is based on actual yield information rather than some outside indicator (such as rainfall or satellite-based measures). Based on our analysis, there is potential for this kind of product to be moderately effective for rice farmers in the Terai. The data collection needed for the contract, however, would be costly.

***Recommendations from Previous Work***

BASIS/I4 recommended implementation of a small pilot study across 250 multi-ward zones (125 treatment zones and 125 control zones) to assess both the implementation costs and the development impacts of an area yield-based index insurance contract. Scaling up this intervention would only be worthwhile if the social and economic impacts are large enough to justify the costs.

In addition, in our most trip report from March 2016, we proposed the “I4-VISA”, or Village-Based Savings Associations, model. This innovative approach to risk management and resilience was inspired by the microcredit sector’s Rotating Savings and Credit Associations (ROSCAs), and their success in developing a market for small-scale finance and inspiring farmer investments. In our initial vision for this part of the intervention, these savings groups would meet regularly and contribute small agreed upon amounts to save for the premium for an insurance purchase. Premiums would then be collected from within the group, then across groups and funneled upward to insurance sales agents.

Finally, BASIS/I4 recommended to the Government of Nepal (GoN) an alternative application of the funds they currently have allocated to subsidize the purchase of agricultural insurance. We recommend a budget-neutral alternative that we believe can help to develop an index market by increasing farmer familiarity and experience with insurance at no personal risk.

**TRIP OBJECTIVES**

This trip had two primary objectives:

1. Further explore the landscape related to savings groups to determine how best to deliver the VISA portion of the intervention.
2. Brief the Secretary of Agriculture and related support staff about the proposed research study, including an alternative subsidy application.

The BASIS/I4 team recently reached out to Freedom From Hunger, a California-based nonprofit organization with expertise working with and enhancing the capacity of savings groups. Given the lack of expertise at BASIS/I4 in implementing savings-group related interventions, we are considering partnering with Freedom From Hunger for the VISA portion of this intervention. This trip was intended to a) bring Freedom From Hunger up-to-speed on the project and introduce them to key stakeholders, b) to better understand the landscape of savings groups in the area of interest, and, if possible, c) to identify a partner microfinance organization or NGO (or both) for delivery of the VISA intervention.

Second, Secretary of Agriculture has not yet approved the proposed research project (and, in particular, the proposed alternative subsidy plan). Despite briefings from USAID-mission staff, the Secretary wanted additional clarification regarding the scope of the project and how that scope was determined (specifically, why rice was the commodity selected). It was determined that an in-person visit from BASIS/I4 leadership may be the best opportunity to address his concerns such that the project can proceed with Ministry of Agriculture and Development (MoAD) support.

**MEETINGS ORGANIZED**

We set up a series of meetings with the following goals:

1. Better understand the financial landscape of our study areas.
2. Assess the feasibility of the VISA model and what additional work would be needed to implement it in Nepal.
3. Identify potential partners for the implementation of the VISA model.
4. Update the Government of Nepal and try to address any questions they might have in hopes of getting GoN support of this project.

**Microfinance**

*Nirdhan Utthan Bank Ltd.*

We met with the Nirdhan Utthan Bank in order to 1) better understand the microfinance landscape in our study areas, and 2) assess the potential of Nirdhan in serving as a partner for the VISA group implementation. As one of the largest microfinance companies in Nepal, Nirdhan Utthan Bank Ltd. (or “Nirdhan Bank”) has branches in every district in the country. They have formed many savings groups throughout the country, through which they conduct nearly all of their banking services. Originally started as a NGO, they split into a separate bank and NGO in order to provide financial services. They still target farmers considered to be the more vulnerable or marginalized, including those with less than 0.5 hectares of land, however are willing to expand their target clientele for the purposes of this project.

**Savings Groups**

*Nirdhan NGO*

The Nirdhan Bank works very closely with Nirdhan NGO, the NGO arm that continues the social mission of the original Nirdhan NGO (prior to its division into a bank and an NGO). After the financial operations were transferred to Nirdhan Bank when the organizations split, Nirdhan NGO limited its activities to providing non-financial services to the clients of the bank, including skill development trainings and market development.

*Nirdhan NGO (Banke Office)*

While in Nepalgunj, we visited the Banke office of Nirdhan NGO, the primary responsibility of which was implementation of the pilot health insurance program in Banke region. The five-year pilot is scheduled to end in December 2016. The Community-Based Micro Health Insurance Program (CBMHI), or “Sanjaveeni”, was intended to increase the access of health services by minimizing health and financial risks to vulnerable populations.

*Samjhauta*

Samjhauta, an NGO with significant experience in savings group development, does intensive training, in particular business literacy training. The business literacy training, for example, is a 12 month, 6 day a week, 2 hour a day intervention. We met with the CEO, Usha Jha, and she indicated that she sees complementarities with what the savings groups are doing, what microfinance institutions are doing, and what we propose. She also said that she thinks that risk management (insurance) is a missing piece, and that farmers would be receptive to such a tool.

*CEAPRED*

CEAPRED (Center for Environmental and Agricultural Policy Research, Extension and Development) is a non-profit organization that has significant experience working with savings groups (especially women-focused groups) to widen improved, sustainable livelihood options for poor and disadvantaged communities. So far, CEAPRED has worked with 300,000 households, and he asserts that all groups that have been formed in their 26-year history still exist and are linked with their district offices. We were referred to them by USAID, as they are a collaborator on the USAID-supported KISAN project. We met with Mr. Keshab Datta Joshi, the Program Director in Kathmandu. Though not involved in any of them, he was aware of recent efforts in the country to conduct crop insurance pilots, but was also aware both of the prohibitively high costs of insurance, as well as the problems of moral hazard and adverse selection. He seemed highly engaged and interested in how to overcome these challenges.

**Other NGOs**

*KISAN*

KISAN (Knowledge-Based Integrated Agriculture and Nutrition) is a USAID-supported project, managed by Winrock International and other partners (including CEAPRED), for farmers in six of our eight originally targeted districts in the Terai. KISAN’s Chief of Party, Phil Broughton, indicated that in their most recent work plan to USAID they had indicated an interest in engaging the insurance problem in Nepal in the coming year, but after beginning to investigate it (through meetings with the Ministry of Agriculture, the Insurance Board and a few insurance companies), they realized that the situation was more complex than they had anticipated. As such, he said he had an interest in what we learned, but that he would leave the insurance work toward us, and hoped to stay engaged on what we learned as we moved forward. In our discussion of the proposed VISA model, he indicated that KISAN farmer groups may be an appropriate intermediary (to serve the role of the insurance-savings groups in the proposed model). While notably different in many ways (KISAN groups are more focused on the transfer of agricultural skills, for example), we wanted to see the groups first-hand.

*KISAN (Nepalgunj, Banke)*

In Nepalgunj, we met with members of the KISAN team for the district, including both Winrock and CEAPRED staff working on the project. We went just outside Nepalgunj to meet with a KISAN-supported group. This group also conducted some of the activities standard to savings and loans groups, including compulsory monthly savings and the intention (once they had aggregated enough funding) to lend to individual members for investment opportunities. The Freedom from Hunger representative noted that, in some ways, this group functioned in a way that was somewhat atypical based on their experience with savings groups, including that they did not lend to members until a certain minimum threshold of savings (which was set rather high) was attained.

*NGO Federation*

In order to try to better understand the landscape of NGOs in the Terai, and to identify potential partners in the region, we spoke to the NGO Federation in Kathmandu. Daya Sagar Shrestha, the Executive Director of the NGO Federation, was not in a position to recommend any individual NGOs over others, but did encourage us to consider to work with different NGOs in different areas – perhaps one each district or one for a cluster of districts. This was because in his experience, there are few Nepal-based NGOs working in all eight districts, and because the individual groups may be able to help navigate the different ethnic groups across our proposed study area. That said, he encouraged us to try to work with local NGOs and to increase the capacity of those groups, rather than to work with an established Kathmandu-based international NGO.

*Microsoft Innovation Center*

At the suggestion of USAID, we also met with the Country Director of the Microsoft Innovation Center, Allen Tuladhar. The Microsoft Innovation Center Nepal partners with local government, academic institutions, industry organizations and software vendors with the ultimate goal of fueling long-term economic growth in the IT industry. They have also worked with UNICEF and other large projects that had the ultimate goal of improving the health and welfare of children, rather than an explicit IT focus. The country office seems to have a large degree of flexibility and independence in what they want to work on, and are not reliant on the parent business or a higher level of administration for their decisions on what work/projects to support. There is no formal application process to work with the Microsoft Innovation Center in Nepal, but rather he allows these partnerships and projects to emerge from his interactions with potential colleagues. Allen seemed enthusiastic about the potential for collaboration with a VISA model, including digitizing education materials or working on digital enrollment.

**Government of Nepal**

*Ministry of Agriculture and Development (MoAD)*

The meeting with MoAD included Michael Carter, the Executive Director of the Assets & Market Access Innovation Lab, as well as several members of the USAID team. Representing the government was the Secretary, as well as some colleagues both from MoAD and the Insurance Board. The Secretary was still very eager to move ahead with the project at a faster rate than proposed, encouraging a move to include a greater number of crops, perhaps even at the expense of geographic spread. We tried to explain the barriers to the inclusion of other crops right away, but there was still pressure to move ahead more quickly.

*Insurance Board*

After the meeting with the MoAD, it became clear that more needed to be done to explain the proposed product to both the Insurance Board and the Ministry of Agriculture. We met with one of the technical experts at the Insurance Board and spent significant time explaining how our proposed insurance product would differ from other crop insurance currently available in Nepal.

**RECOMMENDATIONS**

***Village Insurance Savings Accounts (VISA)***

In our previous trip report from March 2016, we proposed the “I4-VISA”, or Village-Based Savings Account, model. This innovative approach to risk management and resilience was inspired by the microcredit sector’s Rotating Savings and Credit Associations (ROSCAs), and their success in developing a market for small-scale finance and inspiring farmer investments. VISAs would be integrated as much as feasible into existing savings groups in the target communities. They would meet regularly, per the group’s standard procedures, and contribute a small amount each meeting to a dedicated insurance-savings account to gradually pool enough savings to purchase the desired amount of insurance.

In this most recent visit, we learned more about potential partners and their infrastructure. Based on our conversations with Nirdhan Bank and Nirdhan NGO, we believe that they would be an excellent partner for implementation of the VISA model. We briefly describe how this model might work below.

**Current MFI Operations (Based on operations of Nirdhan Utthan Bank, Ltd.)**

* Currently, MFI branch staff attends the monthly meetings of savings group members (usually 15-30 members).
* Savings groups have compulsory savings, voluntary savings, pension savings, and (in some areas) health insurance savings accounts.
* Each month the MFI branch staff transfers the savings into the appropriate accounts at the MFI office.
* Group members have their own savings accounts at the bank.

**Steps to integrate the VISA model into Current MFI Operations**

1. MFI staff will create a separate type of account for insurance-savings. Branch staff will then go out to the field, per usual procedures, to visit the monthly meetings of the savings groups. They will deliver the education program developed by Freedom From Hunger (UC Davis partners).
2. The MFI staff will inform each member of the offer from the government of 100% subsidy of basic coverage. They will ask each member whether they would like to start savings for “Top Up” coverage, what level of coverage they would like to purchase, and work with them to develop an insurance-savings plan to help them reach their goal by the insurance sales deadline.
3. Per usual procedures, MFI branch members continue to attend monthly savings group meetings, collect all savings (including VISA savings as well as other dedicated savings accounts), answer any questions about the insurance, and deposit all savings in the bank. They will make sure group members understand the insurance product, the process to purchase the product, and the deadline for purchase for the season.
4. Savings group members will fill our a form indicating whether they would like to a) enroll in the 100% government subsidized basic coverage and b) indicating what level of “Top Up” supplemental coverage they would like to purchase using their designated savings. At the end of the insurance sales period (May, before planting season), the MFI will aggregate all of these enrollments (for both Basic and Top Up coverage) and submit them to the insurance company.
5. The Government of Nepal transfers to the insurance company the subsidy amount owed for both the 100% subsidy of basic coverage and partial subsidy of supplemental coverage (based on what the MFI submits to the insurance company).
6. Insurance company transfers contract documents to the MFI, which the MFI then transfers to the savings groups to distribute to the appropriate group member. They will continue to answer any questions about the coverage and the degree of protection offered.
7. In the event a payout is triggered, the insurance company will send the MFI the bulk sum for the insured individuals. The MFI then deposits the appropriate amount (based on coverage purchased) to the accounts of the members.

**Some of the problems addressed by the VISA Model include the following:**

1. Insurance companies are not interested in small purchases of insurance (say, half a hectare). This is because this does not provide much business for them, and because reaching the target farmer for sales and distribution would be expensive.
2. Farmers are not familiar with insurance, how it works, or how to buy it.
3. Farmers don’t know – and as a result, may not trust – insurance companies. As a result, they may not buy insurance.
4. Even if they are interested in buying the insurance, farmers may not have the premium readily available when the insurance is offered to them.

**How the VISA Model addresses these issues:**

1. The VISA model uses savings groups to aggregate small purchases into one larger purchase, and to pass on to the insurance company. Similarly, the insurance company, in the event payout is triggered, will distribute to the MFI to deposit in the accounts of the individual contract holders. This increases the market and reduces the cost for the insurance companies.
2. Using the savings groups, the MFI can work with the group to educate them about insurance in general (include its potential benefits and limitations), the specific insurance contract, how to save for it, and exactly how to purchase it. They can also then facilitate the purchase of the insurance through the MFI.
3. Farmers are already highly engaged with the MFI, and accustomed to the sales agents and the operations. They trust them and understand them. By adding this insurance-savings account, it is expanding their existing relationship with the MFI.
4. By creating a savings account for insurance, and through early education, they can save for months in advance of the insurance purchase. When they have saved enough, the purchase can occur.

***Government of Nepal Subsidy Scheme***

In order to encourage the development of a sustainable agricultural insurance market in Nepal, we recommend that the Government of Nepal (GoN) apply their funds designated for agricultural insurance subsidies in an alternative subsidy scheme. The Government of Nepal offers a 75 percent subsidy on the purchase of agricultural insurance. This seems to be motivated by the desire to create an agricultural insurance market, providing an incentive for farmers to purchase the insurance at lower cost. However, the funds dedicated to these subsidies remain largely unspent, despite efforts to encourage uptake in the country.

Previous research has shown that farmers tend to doubt new financial products like index insurance. One way to get around this constraint is to offer discount coupons that cut the price of insurance for the first year. This allows farmers to test, learn about, and experience this new and unfamiliar financial innovation at a low cost and low personal risk.



Insurance payments are calibrated to cover input costs incurred by Terai rice farmers. Based on findings in the literature, it takes 2400 kg of rice or about NPR 50,000 to cover the costs of production for 1 hectare. The proposed payment structure insures that farmers can always cover their production costs, even in years of low yields. Note that the actual strike points and payout levels can be adjusted based on conversations with farmers.

Table 1 below shows the payoff structure and the cost of providing insurance for each of the payoff steps shown in the figure above. We label as “basic coverage” the provision of an insurance that pays the farmer 3200 rupees any time the area yield index falls below 80% of average. The total market cost of providing just this basic coverage level is 806 rupees, including the cost of a 40% administration cost fee for the insurance company.

We label the other 3 payment steps as “top-up coverage.” The table shows the cost of each of these additional steps. The total cost of the combined contract is 2452 rupees. The appendix table bellows gives the additional information that is needed to see how the premium cost was calculated.

*Table 1: Insurance Costs & Payouts for 1 Hectare of Rice*

*(Note insurance will be sold in 0.25 hectare increments)*

|  |  |  |  |
| --- | --- | --- | --- |
| Yield Index Value | Incremental Payout | Total Payout | Market Price (Includes 40% mark-up) |
| Above 80% of Normal | NPR 0 | 0 | NPR 0 |
| \*\*BASIC COVERAGE\*\* | | | |
| 70-80% of Normal | NPR 3,200 | NPR 3200 | NPR 806 |
| \*\*TOP-UP COVERAGE\*\* | | | |
| 60-70% of Normal | NPR 10,115 | NPR 13,300 | NPR 707 |
| 50~60% of Normal | NPR 16,400 | NPR 29,700 | NPR 574 |
| Below 50% of Normal | NPR 20,100 | NPR 50,000 | NPR 365 |
| *Total Premium* |  |  | ***NPR 2452*** |

Agricultural insurance subsidies are conventionally offered as a partial subsidy on the full cost of the contract. Nepal’s current program offers a 75% subsidy on full coverage contracts. The first row in Table 2 shows how such a standard scheme would work for the contract structure detailed above. With a 75% subsidy, the government would pay 1839 rupees and the famer would pay 613 rupees to cover the total cost of 2452 rupees for the contract.

However, conventional subsidies fails to work if farmers are reluctant to pay their 25% share, and such subsidies may never get spent, and the insurance market may never develop. We thus propose an alternative hybrid subsidy model in which a portion of the subsidy funds is used to buy farmers a basic coverage contract. The basic coverage contract will provide farmers a payment of 3200 rupees any time yields fall below 80% of their normal level. This amount is close to the amount that farmers spend on seed per-hectare and hence could be marketed as a seed capital insurance. As shown in Table 2, purchasing the basic contract for a farmer will cost the subsidy fund 806 rupees. Compared to the conventional subsidy of 1839 rupees, purchase of the basic contract leaves another 1033 rupees that can be used to partially subsidize the cost of the top-up coverage. The 1033 rupees in subsidy will amount to a 62% subsidy on the top-up coverage. As shown in Table 2, farmers will have to co-pay 613 rupees to receive the top-up coverage.

While the standard and hybrid subsidy schemes cost the government and the farmer the same amount of money for the same contract, the potential benefits of the smart hybrid scheme are substantial. Specifically, the smart scheme will:

* Create a minimum premium volume for the insurance industry even if no farmers choose to initially purchase top-up coverage. For example, if 30,000 farmers enroll for the free basic coverage contract, total premiums collected will be 24,180,000 rupees.
* With this many farmers receiving basic coverage, we can anticipate that large numbers of them will receive the 3200 rupee indemnity payment, accelerating learning about how the insurance works and trust in the payment system.
* We could thus anticipate that in later years, the chances of top-up coverage sales would increase substantially, especially if facilitated with the VISA model.