SESSION V: FINANCING ADAPTATION: FOOTING THE BILL
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THE POTENTIAL FOR INSURANCE TO HELP THE WORLD'S POOR ADAPT AND THRIVE AS THE CLIMATE CHANGES

Ian Burton* and Thea Dickinson**
*University of Toronto
**The Clean Air Partnership

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EXECUTIVE SUMMARY:

Adapting to climate change will require large, but unknown, amounts of resources for the world's poor. Increasing the modest amounts of global public assistance seems remote, and finding ways to leverage private funds is critical. By providing subsidized insurance, public-private partnerships (PPPs) might play an important role in helping the world's poor become both limit damages from and adapt to climate change. However, choosing places where insurance products will be most effective will require strategic discretion. Presently, the most popular instrument is weather index insurance where payouts are dependent on the occurrence of specific weather phenomenon, rather than the consequences of weather. We assess a sample of pilot projects now underway or in the pipeline. A number of obstacles have emerged including incorporating heterogeneity of land environments, building impartial and immeasurable indexes, generating understanding in all involved parties, avoiding premium-payment confusions, and bringing initiatives to scale. Questions also remain about how best to roll out insurance mechanisms. Do we wait for pilot projects to flourish, increase appeals to the private sector, or integrate insurance in future climate agreements? Because future climate agreements will seek to find ways to share risks and deliver resources,

this third option may be best. The private insurance industry is well accustomed to sharing risk and innovative PPP insurance schemes may offer the most pragmatic means of delivering funds for climate change directly to the poor.

Climate change is upon us and even under the most optimistic of the Intergovernmental Panel on Climate Change (IPCC) emission scenarios will continue for many more decades. In these most authoritative of projections global mean temperature continues to rise beyond the end of the 21st century even if emissions peak around 2040. Due to inertia in the climate system ice melt and sea level rise are set to continue for much longer. The Mitigation of climate change itself will, we trust, be achieved sooner or later. Adapt we must and now.

The global climate negotiations under the United Nations Framework Convention on Climate Change (UNFCCC) are at a crucial stage. It is planned to reach a new comprehensive agreement in Copenhagen in December 2009. The road map to the agreement is set out in the Bali Action Plan and it includes adaptation as one of the four pillars of the proposed agreement, together with mitigation, technology, and finance. The adaptation component includes insurance, some workshops, and a technical paper in an attempt to find a way forward. The past record of performance on insurance within the UNFCCC process does not suggest that great expectations are warranted.

Adaptation is more than just coping. To cope means to struggle with something enough to get by or to survive. If the balance of development is to be tipped more strongly in the right direction the poor must be enabled to do more than cope. Like the rest of us, they must be enabled with sufficient help to adapt and thrive.

Can insurance help the poor to adapt in such a way that they can thrive economically, socially, and environmentally, and make a contribution in a more self-reliant way? So often their best efforts to adapt are eliminated by extreme climate-related weather events. In other circumstances the impacts of climate change are more chronic than acute. The sea slowly rises into the densely populated and low lying delta lands; the rains fail more often and what was once seen as periodic intermittent drought is now understood to be a process of progressive desiccation. To attempt in the longer run to adapt in such localities is a losing battle. It is palliative adaptation. To attempt to use insurance or other development assistance in such circumstances is a humanitarian thing to do. It is also important to understand that when adaptation *in situ* cannot work out migration in the long run is the only option. In choosing places where insurance products can be made available to help the poor adapt and thrive under the stresses of climate change some strategic discretion must be used.

This paper briefly examines some of the present efforts to spread insurance to the poor. A number of relatively small scale experiments and pilots are underway. They need to be closely examined to see what lessons can be learned; would they profit by being part of a more systematic and collective effort? Can insurance for the poor be delivered by the private sector?

A ROLE FOR THE PRIVATE SECTOR?

In what ways might the private sector be expected to help the world's poor adapt to climate change? The overwhelming proportion of foreign direct investment is made in the private sector. Public sector investment in the shape of grants and loans coming from bilateral aid agencies and international financial institutions is small by comparison.[*] Is it reasonable to suppose that profit seeking enterprises will help the poor to adapt to climate change?

The costs of development and of needed investments are likely to increase substantially due to human induced climate change. The UNFCCC has estimated that incremental costs for adaptation will amount to tens of billions of dollars per annum by 2030.[†] This figure may seem large but it is in fact only a relatively small proportion of total investments anticipated. The figure is larger in relation to public investments, especially considering that contributions to the costs of adaptation in particularly vulnerable countries have been agreed to be additional to regular official development assistance and not part of it.

Under the Climate Convention the developed country parties have agreed, in principle, to "help meet costs of adaptation." Note that the text does not refer to "*some*" costs or "*all*" costs but "*agreed*" costs. Some funds have been provided towards the cost of adaptation through the Global Environment Facility on the basis of voluntary contributions, but these remain small in relation to the need. Another source of funds for adaptation is the new Adaptation Fund now established under the Kyoto Protocol. The fund is new and is still developing its procedures. It is supported by the 2 per cent levy imposed on transactions under the clean development Mechanism of the Kyoto Protocol. But the fund does have some potential to receive, administer, and allocate funds from other sources.

The modest amount of funds made available through the public sector so far has led to calls for the establishment of massive international funds – a sort of "global adaptation fund" financed by an international levy. The chances that such a purpose dedicated fund will be agreed upon seems remote for many reasons. The idea of a new global adaptation fund has also been linked to the need for a disaster fund. While there is a case to be made for linking funds for climate change adaptation with disaster losses, complications arise because not all "natural" disasters are climate related and many climate losses are not acute disaster-related but arise from chronic and incremental change.

Given that the public sector seems unlikely to provide more than a small proportion of the funds that are needed for adaptation to human induced climate change especially for the poor in developing countries, can the private sector step up to the plate?

There are in principle three ways in which the private sector can help. First, private sector investors can ensure that the development projects for which they are responsible are not themselves vulnerable to climate change, and that they do not induce or facilitate a pattern of development which increases exposure to climate risks for their employees, the communities where they are located, and their suppliers. To a large extent the private sector

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[*] UNFCCC, *Financial Needs and Flows for Mitigation and Adaptation* (Bonn, 2007).
[†] Ibid.

might be expected to act in accordance with this objective. More explicit public statements and evidence could be provided by private sector companies to show the public and their own shareholders that they are in fact exercising due diligence. Some evidence suggests that private sector corporations are not fully alert to the climate risks that they themselves face. More attention to this should be encouraged.

A second way in which the private sector can help is through the practice of exercising corporate social responsibility. Certainly it is to the advantage of companies to behave in a socially responsible manner especially if they can publicise their activities and the results and show that they have indeed benefited the countries and communities in which they invest. With the rapid growth in private sector investment now coming from a greater diversity of corporations located in more countries it is becoming much harder to know to what extent and how genuinely corporate social responsibility policies are being applied. The topic of corporate social responsibility is being more widely discussed, for example in the World Economic Forum, but this does not yet seem to have penetrated far into the realm of climate change adaptation.

In any event, it seems neither ethical nor economically promising to rely on corporate socially responsible behaviour to provide significant help to the global poor in coping with their exposure to human-induced climate risks.

A third way in which the private sector might help is through public-private partnerships (PPP). The suggestion is to create mechanisms and arrangements such that the richer countries meet a larger proportion of their obligation to help the global poor, and that the private sector has an opportunity to participate in a process which would eventually lead to the creation and growth of new markets. Where such opportunities exist or can be created they should also meet the criterion of promoting adaptation and reducing vulnerability to climate change.

One such option is insurance, especially micro-insurance. This requires that new insurance products be created through PPP and that these be marketed to the poor in a manner that they can afford, usually with substantial subsidies of the initial premiums by the public sector.

THE EXPERIMENTAL PHASE

> *"Most of the world's population cannot afford insurance. Compounding the problem, residents of the developing world are also often the most vulnerable to the impacts of climate change. Yet growth of insurance in "emerging markets" is the future of the insurance industry…"*
>
> - Evan Mills

The idea that public-private partnerships might provide a means to reach the poor and help them to cope—or preferably adapt and thrive—under conditions of on-going climate change has recently been gaining attention. Many relatively small-scale and pilot projects are now underway or in the pipeline. A canvass of sources has identified 18 examples. Three examples are presented below and 15 smaller examples are listed in Annex I.

The most popular instrument is weather index insurance. This is a form of insurance where payouts are dependant upon the recording of a specific weather phenomenon. Weather index insurance relies on the occurrence of a weather event (for example a rainfall event), rather than crop failure which is the consequence of weather. Briefly, a location with historical index data is chosen. The mean of the index (average rainfall, temperature, and water levels) is calculated, and a range below the average index (rainfall) is selected. Payments are based on seasonal rainfall being within this range. If the rainfall is equal to or greater than the average rainfall, no payment is made. If the rainfall is less than average (in the event of drought) the index is triggered and payment is automatically delivered to the farmer, regardless of crop outcome. Using a measureable index reduces problems previously associated with crop insurance, while retaining the objective. There are several advantages of using an index including remote measurements, which decrease the requirement for onsite visits that in turn decrease transaction costs. Provisions can include that those receiving loans are required to obtain weather index insurance.

Examples

Ethiopia:

In 2006, the United Nations World Food Programme (WFP) conducted a one year pilot project of weather index insurance in Ethiopia. For $930,000, the WFP purchased index insurance from reinsurer AxaRe. Rainfall data was recorded from 26 weather stations in Ethiopia from May 2006 to October 2006 for the index. Payment was based on average rainfall and payment was triggered if the index was lower than the historical average. If a drought occurred, the actual estimated loss would have been $55 million where AxaRe would provide a maximum payout of $7.1 million if the index was lower than average. For the first pilot the index was not triggered and no payment was made since the average rainfall for the 2006 season was not lower than average.

The second phase of this project is currently in development in Ethiopia and is set to start in 2009, ending in 2011. The partnership includes both WFP and AxaRe. This second phase is expected to cover 1.5 million people over 2 years, with costing assessed at $5 million with a potential $60 million payout.

India:

In 2003, a one year pilot project was conducted in Andhra Pradesh, India. The project was initiated by ICICI Lombard in partnership with the International Finance Corporation (IFC). Together they developed rainfall index insurance. BASIX, one of largest microfinance institutions in India through the KBS Local Area Bank sold insurance policies to 154 groundnut farmers and 76 castor farmers. The premium rates for farmers were US$8 for the small farmers (less than two acres), with a maximum possible payout of $280. Medium farmers paid $12 for a maximum payout of $400 (for 2 to 5 acres) and large farmers paid $18 for a maximum payout of $600 with greater than five acres of land. The total potential payout was $64,000. During the 2003/04 season, groundnut rainfall index was measured at 516mm which was 21 percent lower than the 653mm required for groundnut growth, resulting in payments to the farmers.

Malawi:

In 2005, the World Bank's Commodity Risk Management Group (CRMG), the National Smallholder Famers' Association of Malawi, and the Insurance Association of Malawi partnered to develop a rainfall index insurance pilot for groundnut farmers. Nearly 1,000 farmers in 4 project areas participated in the first year of the project (with 2,500 sold in 2006). Farmers were able to acquire loans for high quality groundnut seed if they purchased weather index insurance. Payment was based on rainfall requirements for the seed and could be triggered by the seed being unable to be sown, due to lack of rainfall, and three plant phases: establishing and vegetative growth, pod formation and flowering, and lastly, pod filling and maturation. The first pilot season resulted in 3 out of the 4 project areas receiving adequate rainfall for all stages of growth and maturation; however, one location resulted in a $0.68 payment to each farmer.

Some Lessons and Questions from the Experimental Phase

Most of the pilot projects in PPP weather derivative insurance directed to the poor in rural areas have not been in operation long enough to permit clear assessments to be made. Nevertheless it is possible to identify a number of problems and potential solutions:

- ***Microclimates.*** Due to heterogeneity of land environments (differing topography), microclimates need to be identified.

If a gauge is for an area of 20km^2 and that area receives uneven rainfall, a selection of farmers would receive adequate rainfall, growth, and would then have the ability to sell their crops. Others would be plagued by drought, limited growth, would be unable to sell their crop, and would not receive payment.

The solution would be to have a denser network of rain gauges strategically placed in microclimates to ensure that the index is triggered properly.

- ***Impartial and easily measurable index.*** The index must be easy to measure and be impartial.

A rainfall index has both of these qualities. A hurricane index is not as straightforward an index since there are several variables.

Data from measurement equipment should be recorded at an external site to ensure it cannot be manipulated. Historical data should also be a requirement (though it may not be possible in all locations) since it provides the historical mean which the index is based upon.

- ***Lack of understanding.*** The process must be understood by all parties involved. Lack of understanding is more apparent for the insured rather than the insurer.

A farmer may not understand how the index works, how it is measured and triggered, or how payments are received.

The solution to this would be to ensure that all parts of the process, contract, and project are transparent and explained to all involved with an impartial body overseeing the process.

- ***Incorrect or no payment.*** Several factors can contribute to incorrect or no payment being received. The index may not be triggered, even though crop failure occurred, or crops may have grown and payments were received.

Seed quality is significant to crop success. Expired seeds may not germinate in adequate rain conditions. Payment would therefore not be received since the index would not be triggered.

To increase success, high quality seeds should be advocated to ensure that farmers, insurers, and lenders all benefit from this process. Successful crops are a win-win for all parties involved.

- ***Who pays?*** The premium may be paid by the insured or by a subsidising body.

Initially, premium payments may have to be made by a subsidizing body. Ideally, as the project continues, and poverty alleviation starts to be achieved, payments should be shifted to the insured and subsidizing bodies should withdraw from the partnership.

Premiums must also be affordable.

- ***Sustainability.*** The project, equipment, and technology must all be sustainable.

Equipment to measure the index must not require continual maintenance, nor should it require on-site recording of information, since this increases costs and decreases sustainability and the success of the project.

Equipment should be upgraded and replaced as more efficient and cheaper technology becomes available, while malfunctioning equipment should trigger a notification to an external data collection center to ensure proper maintenance. This process increases the sustainability and security of the project such that payment may still be received and that faulty equipment is not a rational for a default on payment.

- ***Scaling up.*** Pilot projects should be designed with scaling up in mind. The most successful projects would be those that can be expanded to large-scale, country wide programmes that are sustainable and affordable to all parties involved.

TIME FOR A GLOBAL INTEGRATED ASSESSMENT AND INITIATIVE

What might be done to realize the potential benefits of PPP sponsored insurance for the poor? Three broad options are suggested. One is the status quo. Let the pilot experimental phase continue and let the process expand in a relatively spontaneous way. When the products and concepts have been proven then the private sector will move in more aggressively and the potential will be realized. Such an approach would be relatively safe. It would be largely at public expense. And it would take a long time – almost certainly a longer time than is necessary to have an influence on present negotiations.

A second option would be to attempt to engage the private sector to a much greater extent and with greater urgency. This might be possible but without some additional incentives this process is unlikely to result in significant progress in the short term. The insurance and re-insurance industries have shown interest in the development of climate-change related weather insurance. It is seen as a potential new market at least in the long term. At present however, the market is too small and the transaction costs of delivery to the poor are too high. And there are many practical problems in application that have yet to be worked out. Few can afford to pay the full actuarial costs of the premium, and the products are not yet properly tested or proven.

A third option is to develop a thorough assessment on the basis of recent experience and then formulate a new initiative that could be considered in the ongoing negotiations. How might this third option be advanced? Some would look to the UNFCCC process itself. But the internal workings of the process are such that new and workable ideas almost always need to be generated from the outside. Another highly creditable international body is the IPCC. But its processes are also slow and its mandate does not permit the generation of new policy proposals.

Some new initiative is required if insurance is to be given a serious hearing in the negotiations over the next 18 months.

The proposal is that a high level group or task force be formed and given a mandate to perform and oversee the necessary work by a dedicated secretariat and experts. The group itself would either need to be created under one or more international and intergovernmental authorities or to receive recognition from such authorities once established and underway. This was in fact how the Brundtland Commission came into being.

How might such a group be constituted? Its membership should include persons with world recognition and influence. Members would be selected from the private insurance and reinsurance industries, the international financial institutions, and from civil society, including some with a claim to represent or speak for the poor. It would also include independent "influentials" not connected to the insurance industry. Above all it should have credibility and an arms-length relationship to special interests.

What might such a group do? It could begin by carrying out an in depth study of existing and proposed PPP insurance products and the pilot and experimental efforts reported in this paper and elsewhere. This might be carried out along the lines of a "Stern-type" review. On the basis of such an assessment the group might then formulate a limited number of practical proposals that could be placed before the negotiators.

It is premature to attempt to specify in any detail what such proposals might include. But broad possibilities include the creation of an international mechanism under the Climate Convention, and the initiation of a design process flexible enough to incorporate different sorts of insurance products. The aim would be to incorporate a negotiated initiative on PPP insurance for the poor for inclusion on the 2009 Copenhagen agreement. This might be thought of as a stand-alone "insurance for adaptation" protocol or as a legal instrument to be incorporated in the comprehensive Copenhagen package.

RATIONALE AND EXPECTATIONS

In the present international global context there are additional reasons why such an initiative for PPP insurance to access the poor is warranted. And even if such an initiative were to be taken and fall short of its objectives there are fail-safe reasons to believe that it would provide a useful service.

Three different objectives are suggested for the design and marketing of PPP subsidized insurance products for the poor at risk from climate change. The objectives relate to the promotion of global justice and equity, with the promotion of adaptation, and with the creation of an expanding and profitable insurance market.

Climate change is a unique global environment issue and has been recognised as such in the UN Framework Convention. The text of the Convention states that anthropogenic climate change is "a common but differentiated responsibility." This formulation is an expression of the understanding reached in the negotiations that those countries historically responsible for the larger share of greenhouse gas emissions bear a responsibility to help those most severely impacted bear the costs, specifically the costs of adaptation. It is an extension of the polluter pays principle, by now well established and accepted in environmental law and practice. A logical extension of the polluter pays principle would be that the polluters agree to pay compensation to the polluted. In the case of climate change, considerable scientific and practical obstacles make the meaningful calculation of "liabilities" impossible, even supposing that the historical polluters would find the idea acceptable which they do not. This is not to dismiss the arguments based on ideas of "global climate justice." However inoperable or idealistic this may seem, the case will continue to be made.

The notion of helping with the costs of adaptation has been accepted however. The problems here include the fact that the costs of adaptation to human induced climate change are high and also practically impossible to measure. Nor is it practicable to allocate the costs among the polluters. Furthermore there are deep suspicions that free direct payments for adaptation would not be truly additional but would simply be a diversion of development assistance. In the other direction, there is a lack of confidence that payments would be effectively used and properly and transparently accountable. A case for publicly subsidized insurance can be made on the grounds that it is helping to redress the global injustice of climate change. The purists object to insurance on the grounds that it implies that some premium has to be paid sooner or later and that this is fundamentally unjust. The pragmatist argues that PPP insurance for the poor could be a practicable approach that could be designed to deliver other benefits.

Salient among the "other benefits" is the promotion of adaptation. If PPP insurance products can be designed in a manner that facilitates, promotes, and encourages adaptation then the second objective can also be served. This could give the proposed initiative extra appeal to the negotiators in the Framework Convention. The insurance industry is more accustomed to thinking of insurance as a risk sharing activity. In the case of climate-related risks it can also serve as a social policy instrument for achieving adaptation.

The third objective of expanding the availability of insurance to poor people in a direction and in regions of the world where it has been weak or absent is clearly something that the industry should welcome. In the initial phases returns for the involvement might well be very meagre or negative. But as has been seen in the case of microfinance, small beginnings in the public and volunteer sector can lead to new and profitable opportunities for the private sector. The critics should hesitate before condemning this as making profit from climate change. Profits there may be in the longer run but the main beneficiaries of a well designed set of PPP products would surely be those at risk and by extension the security and well being of the global community.

If a new initiative of the kind described could be brought to fruition what are the expectations for success? One optimistic view is that insurance might actually appear in the text of the Copenhagen agreement in a meaningful way. A measure of meaningfulness is that the parties to the convention take on legally binding commitments. A minimal commitment would be that the parties agree to negotiate a future legal instrument. In 1995 at the first conference of the parties in Berlin it was agreed to negotiate a protocol to the convention to deal with greenhouse gas emissions. A negotiating body was established known as the Ad Hoc Working Group on the Berlin Mandate. This group drafted a protocol that was successfully negotiated and signed at Kyoto some two years later. Further comparison would be less encouraging perhaps. But if the conference of the parties at Copenhagen in December 2009 could establish a working group on insurance this would be a significant but a minimal step forward. There are reasons to hope that more could be achieved. Parties might undertake to provide some level of financial support for insurance, subject to agreement on the detailed design of the mechanisms. The Munich Climate Insurance Initiative (MCII), among others, has recently given a lot of thought to the detailed design of the mechanisms.

But what, the sceptic will ask, if these worthwhile objectives fail? What if the very idea of including a form of publicly subsidised insurance on climate related risks for the poor is unacceptable or the parties cannot work out even a minimal agreement? Then the report prepared by the proposed high level international review and assessment will provide an authoritative report on the state of the art and the proposals will remain on the table. The ad hoc uncoordinated pattern of generating insurance products for the poor will continue and be given extra visibility and momentum. The movement towards great social climate justice and better adaptation to climate change is not likely to run smoothly, nor can it be stopped. There is now a narrow window of opportunity for the private sector to play a significant role in the process.

ANNEX 1

Africa:

Millennium Promise partnered with Swiss Re and the International Research Institute for Climate and Society to launch the Climate Adaptation Development Programme to provide insurance for 400,000 people in 10 African countries. The premium was paid by donors to the NGO. The maximum payout that could be made by Swiss Re was for an $18 million payout.

Caribbean Island States:

In 2007, an innovative multi-country catastrophe pool was formed called the Catastrophe Risk Insurance Facility. The index is based on data from the National Oceanic and Atmospheric Administration and the U.S. Geological Survey and helps to provide governments with immediate liquidity in the aftermath of hurricanes.

Kenya:

In Kenya, contracts were developed for maize grown in the long rainy season, but due to the very long growth requirements, contracts do not cover the final stage of growth.

Mexico:

The Mexican government is using index insurance to reinsure two disaster relief funds: *Fondo de Desastres Naturales* (FONDEN) and *Fondo para Atender a la Población Rural Afectada por Contingencias Climatológicas* (FAPRACC). The program offers contingent payments for damage to productive assets caused by drought, frost, hail, excess rainfall, floods, and windstorms. By using index insurance to reinsure the government emergency response, the government is able to maintain the sustainability and solvency of the disaster relief programs.

Mongolia:

Index-based Livestock Insurance Pilot that began in 2005, supported by the World Bank offers insurance to herders to protect them against high livestock losses due to severe winters. Private insurance companies sold index insurance for livestock to 2,400 herders (9 percent of eligible herders) in 2006, the first pilot year. The pilot structures a public-private partnership where insurers sell a commercial product to protect herders from moderate to large livestock losses and the government provides financing for extreme losses. The index is based upon county-level livestock mortality rates that are collected by the national statistics office. The major underlying cause of large livestock losses is summer drought followed by severe winter weather. Commercial insurers sell the Base Insurance Product, which indemnifies for losses when livestock mortality for the county is between 7 and 30 percent. When losses exceed 30 percent mortality, the government pays for them with a Disaster Response Product. In the second pilot year, 13 percent of the eligible herders purchased this insurance.

Nicaragua:

In 1998, the World Bank and the Nicaraguan government investigated the feasibility of initiating the use of weather index insurance. In 2005, a pilot project was started and in 2006 it was expanded. Purchasing index insurance is linked to loans and reduction of interest rates to farmers.

Peru:

A USAID-led pilot project in Peru uses El Niño Southern Oscillation (ENSO) Index Insurance. The ENSO Insurance is based on an index of sea surface temperatures off the coast of Peru and would pay when there are anomalies in these temperatures, since warming leads to extreme rainfall and flooding in the northern regions of Peru causing significant damage to crops, infrastructure, and the economy.

Romania:

In 2001/02, USAID conducted a feasibility study on opportunities for using area-yield and rainfall index insurance for financing catastrophic yield risk to Romanian farmers.

Tanzania:

In Tanzania, a pilot was implemented in 2007 for drought risk and linked to lending. The index measured was rainfall with the crop being maize. Since Tanzania did not have historical information the index was based on model output and expert information.

Ukraine:

The weather index insurance pilot project was implemented in Ukraine from 2003 to 2005 by the IFC's Agribusiness Development Project and the World Bank's CRMG. The first weather index insurance contracts were sold in 2005. The pilot project was in Kherson, Ukraine where farmers suffer from several weather anomalies. The area has 412 commercial and 2,900 private farms. The total annual value of production is approximately $400 million. The pilot insures rain-fed crops and high-value crops with weather index insurance, covering $50 million of value.

Vietnam:

The Asian Development Bank (ADB) has been developing a pilot project for weather index insurance in Vietnam. The project is based around flood damage to rice harvests. The index is based on river levels and the insurance is linked to loans.

Table 1. Other examples of index insurance pilot projects

Country	Climate Risk Event	Insurance Structure	Measured Index	Current Status
Bangladesh	Flood/Drought	Index insurance for disaster relief/linked to lending	Rainfall	In development, possible launch in 2008
Honduras	Drought	Index Insurance	Rainfall	In development
Kazakhstan	Drought	Index linked to MPCI program	Rainfall	In development
Mexico	Drought	Index insurance	Rainfall, Wind speed Temperature	Initiated in 2001
Senegal	Drought	Index linked to lending	Rainfall and crop yield	Proposed
Thailand	Drought	Index linked to lending	Rainfall	Pilot implemented in 2007

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