

The Fair Climate Network & Low Carbon Farming

Table of Contents

1.	BACKGROUND	1
1.1.	FCN Members & Low Carbon Farming	1
1.2.	Ecological Regeneration	1
1.3.	Sustainable Agriculture & Peasant Youth	1
1.4.	History of FCN & Sustainable Agriculture	2
1.4.1.	4th CDM Meeting – 3 December 2008	2
1.4.2.	5 th CDM Meeting – 27 & 28 March 2009	2
1.4.3.	6 th CDM Meeting – 4 & 5 July 2009	2
1.4.4.	Zach Willey’s Visit – 19 - 29 January 2010	2
2.	LOW CARBON FARMING.....	3
2.1.	Scope	3
2.2.	Strategy	3
2.3.	Technologies.....	3
3.	EDF-FCN PILOT.....	4
3.1.	Environment Defense Fund - FCN Partnership.....	4
3.2.	OBJECTIVE.....	4
3.3.	STRATEGY	4
3.3.1.	Staffing.....	4
3.3.2.	Field Studies	5
3.3.3.	Technologies & Methodologies	5
3.3.4.	Carbon Contracts.....	5
3.3.5.	Packaging.....	5
3.3.6.	Implementation	6
4.	THE NEXT STEPS.....	7
4.1.	Participant NGOs	7
4.2.	Orientation for Staff	7
4.3.	Calculate the Baseline	7
4.4.	Choose Appropriate SA Practices	7
4.5.	Create an Awareness.....	8
4.6.	Select Participating Farmers.....	8
4.7.	Contract with Tristle	8
4.8.	Obtain Land Titles.....	8
4.9.	Draw up Carbon Contracts	8

4.10.	Prepare Offer Sheets	9
4.11.	Budget	9
5.	ISSUES TO WORK THROUGH.....	9
5.1.	Duration of the FCN-EDF Pilot	9
5.2.	Sequestration Activities.....	9
5.3.	Standards & Validation.....	9
5.4.	Monitoring & Verification.....	10
5.5.	Finding a Low Carbon Farming Expert.....	10
5.6.	Finances.....	10

The Fair Climate Network & Low Carbon Farming

1. BACKGROUND

1.1. FCN Members & Low Carbon Farming

The Fair Climate Network supports its Members to develop Energy CDM Projects that generate CERs and claim carbon revenues for the sustainable development of the poor. Except for ADATS' attempt to develop an Afforestation/Reforestation (A/R) CDM, no one has ventured into Land Use and Land Use Change (LULUC) projects.

But the reality is that a large number of Network Members are grassroots NGOs, keenly involved in Sustainable Agriculture (SA) efforts. They have developed remarkable technologies that go by various terms like organic farming, chemical free cultivation, low external input measures sustainable agriculture, permaculture, etc. These have resulted in shifts in cropping patterns and cultivation practices, and demonstrated drought resistance. They have shown these techniques as workable on Pilot plots and demonstrations that range from small pockets in scattered villages to hundreds of hectares in contiguous tracts. Scaling up these SA practices is the challenge. This will be possible if the small and marginal farmers were given an incentive to adopt the new practices.

Quantifying methane avoidance in practices currently being propagated under Sustainable Agriculture, introducing new practices to further bring down the carbon footprint, and claiming Emission Reductions to earn carbon revenue could be the solution.

Low Carbon Farming therefore becomes a serious concern for the Fair Climate Network.

1.2. Ecological Regeneration

Low Carbon Farming creates the conditions for a healthy farm ecosystem and vice-versa, healthy ecological conditions and sustainable practices support low carbon farming. Biomass needs to be established in terms of vegetation and cattle, organic waste from livestock. Biodiversity through birds and insects. These form critical elements in Low Carbon Farming. The reduction and eventual elimination of agro-chemical intervention is a must. Adequate vegetation produces adequate Biomass which goes into the soil in order to enrich it with carbon. Tree cover, along with medicinal herbs, produce fodder, fibre and fruit.

In semi-arid drought prone regions like Anantapur and Chickballapur districts, long term investments are needed to promote the above described basic elements of ecology. Only then will the milieu be hospitable for Low Carbon Farming. Serious and heavy investments are needed to bring diversified vegetation and a balanced/healthy animal population – both of which are severely depleted in the past few years through mainstream practices propagated by “modern agriculture”. This will automatically add other biodiversity in species of birds, insects etc.

Such investments would themselves be a measure of carbon sequestration. Long term measures should form a substantial part of efforts undertaken in order to secure the future of Low Carbon Farming.

1.3. Sustainable Agriculture & Peasant Youth

An issue with subsistence cultivation carried out more as a custom or tradition, is that it offers very little excitement to the participants. On the other hand, when small and marginal farmers attempt to imitate mainstream capital intensive practices of the *Ryots*, they land

themselves in a soup due to insufficient knowledge, inadequate capital, and an extremely low risk taking capacity.

The younger generation of farmers' sons and daughters get increasingly alienated and look to other, often non-existent, economic opportunities which are also way beyond their reach. Unmet expectations and unsated dreams lead to a general frustration and discontent in the countryside.

Through Low Carbon Farming, we can try to bring an excitement into agriculture, using environmentally sound, state of the art technologies that are not mainstream. This will absorb schooled and educated peasant youth in productive activities in an expanded rural economy. Skilled and motivated labour force will be engaged in profitable cultivation, with regular and reliable income. Field crops will be grown mainly for food security. Non-Farm jobs and economic activities will be created through an increase in biomass.

1.4. History of FCN & Sustainable Agriculture

1.4.1. 4TH CDM MEETING – 3 DECEMBER 2008

9 of us attended a half day meeting hosted by SEDS at Anandapuram, where we explored the possibilities of bringing sustainable agriculture within the realm of CDM. M.P. Kanal explained the CDM cycle, and Sudha Padmanabha enumerated existing methodologies.

We came to the sobering conclusion that there wasn't much scope to interpret existing SA practices of grassroots NGOs within CDM. In spite of that, we decided to list our current practices in organic farming, low external input sustainable agriculture, permaculture, *et al*, and re-examine possibilities once more.

1.4.2. 5TH CDM MEETING – 27 & 28 MARCH 2009

4 months later, Sudha made a detailed presentation on CDM methodologies in agriculture sector, which is dominated by methane avoidance projects, and none on sustainable agriculture. Once again, we couldn't see much scope in pursuing the CDM path. But FCN Members did get clarity on opportunities and challenges. Our resolve to find a solution got steeled.

1.4.3. 6TH CDM MEETING – 4 & 5 JULY 2009

3 months later, the second day of our CDM Meeting was entirely devoted to discussions on the scope of agriculture in CDM. Sudha Padmanabha made a presentation that pretty much summed up that there are no established CDM Methodologies for the type of activities we grassroots NGOs would take up with small and marginal farmers. M.P. Kanal and Ram Esteves asserted that, in spite of this, agriculture was going to be a major sector in the coming years.

Richie Ahuja then explained how the Duke Standard had already been developed. The first glimpse of hope emerged in this meeting with a better understanding of the VER route, Voluntary and US markets. It was decided to set up a long term collaboration between Environment Defense Fund (EDF), New York, and the Fair Climate Network.

1.4.4. ZACH WILLEY'S VISIT – 19 - 29 JANUARY 2010

Environmental Defense Fund, New York, is a leading national non-profit organisation that links science, economics and law to create innovative, equitable, and cost effective solutions to society's most urgent environment problems.

Zach Willey, a Senior Economist at EDF, specializes in developing economic solutions to greenhouse gas emissions and natural resource degradation problems in terrestrial

ecosystems. Along with Bill Chameides, he has co-edited a Handbook to use when evaluating which standards to adopt for the voluntary market, *“Harnessing Farms and Forests in the Low-Carbon Economy : How to Create, Measure, and Verify Greenhouse Gas Offsets”* A synopsis is available in our Library at www.fairclimate.com/library.aspx .

Zach and Richie visited 4 grassroots NGOs, including ADATS, SEDS, AF and Sacred, from 19 to 25 January, and held discussions with PWDS from Tamil Network. On 26 and 27 January, they met with various scientists from SAN, ICRISAT and CRIDA at Hyderabad. A Synopsis of SA practices observed in the field visits are also in our library.

On Friday, 29 January 2010, we held a round-up meeting at the FCN Tech Team office in Bangalore where it was decided to take the collaboration forward.

2. LOW CARBON FARMING

2.1. Scope

The farm sector offers significant opportunities for carbon sequestration and Emission Reductions. Emissions from farming contribute 14% of global Greenhouse Gases. In India, farming contributes to 28% of the national GHG emissions. These projects offer farmers the opportunity to capitalize on the carbon market, as they shift to agricultural methods that are more sustainable, involving lower input costs that result in reduction and sequestration (improved soil carbon content) of carbon emissions in the process.

2.2. Strategy

Agricultural VER Projects support sustainable farming by encouraging farmers to adopt a basket of practices that reduce/minimize/remove the use of synthetic fertilizers (methane avoidance and N₂O deduction) while, at the same time, improving soil carbon content (Sequestration). This is done through reduced tillage, precision fertilization, anaerobic composting, using organic fertilizers, mulching, intercropping, multi-cropping, and a horde of techniques specially designed for particular regions, populations and climatic zones.

Carbon sequestration activities include planting fuel, fodder and fruit trees, and protecting those that are already there on the farms. Fast growing vegetation that do not encourage nesting by vermin can be planted on field bunds and boundaries, or on plots that are not currently utilised to maximum potential. This vegetation can be used for mulching.

Planting multiple crops on the same field support biodiversity. Proper crop mixes, based on science and demonstrated results, promotes resilience by bringing about a balance in the farm ecology and reducing the risk of crop failures due to pest attack. Multiple cropping also reduces the risk exposure for farmers against erratic and spatial rainfall.

2.3. Technologies

To reduce agricultural CO₂, CH₄ and N₂O emissions and sequester Carbon:

- Use reduced or no-tillage farming
- Alter crop mixes and rotations
- Change the timing, amounts, and frequency of the use of fertilizers and other inputs that use energy
- Change the mix of irrigated versus dry land
- Increase irrigation efficiency
- Change the management of livestock manure
- Change the types of livestock and their diets to reduce the release of methane from their digestive tracts

- Change approaches to managing water and straw in rice production
- Increase irrigation efficiency
- Change the timing, amounts, and frequency of the use of fertilizers and other inputs that use energy
- Convert cropland to grassland
- Improve the quantity and quality of forage on grazing land, and move herds more often
- Plant trees

3. EDF-FCN PILOT

3.1. Environment Defense Fund - FCN Partnership

The EDF-FCN Pilot will explore the viability of procuring Verified Emission Reductions (VERs) from the cultivation of small and marginal farmers. In the first 1½ to 2 years we will:

1. Inventorise current farming practices and calculate the Baseline Emissions in 4 regions where Accion Fraterna, SEDS, Sacred (a Scindea partner) and PWDS work
2. Develop Methodologies that clearly identify new practices that need to be adopted to reduce emissions
3. Calculate pragmatic Emissions Reductions that can be achieved by adopting these new practices

EDF will provide the scientific backup and support for the Pilot, and are committed to the long haul that any serious work in agriculture entails. Participants in the Pilot will delineate project boundaries, establish tenure, and develop carbon contracts with farmers.

FCN will manage NGO dynamics and bring latent potential to the table.

The FCN-EDF partnership will increase the reach of both parties. EDF is a science based organization that has worked for the last 10 years to develop methodologies and demonstrate VER generation potential for the agricultural sector across the globe. They have completed 100 plus projects in the USA and are currently engaged with the farming sector in China and Vietnam.

3.2. OBJECTIVE

In order to get clarity on how the Fair Climate Network (FCN) would collaborate with the Environment Defence Fund (EDF), we outlined the Objectives:

- (a) Small and Marginal Farmers we are working with Encouraged to Shift to Low Carbon Farming through Specific Shifts in Farming Practices/Technologies
- (b) Small and Marginal Farmers Assisted to claim Carbon Credits from the Voluntary Markets

3.3. STRATEGY

The strategy to achieve the above Objectives would be as under:

3.3.1. STAFFING

- Appoint a full time Expert in Low Carbon Farming to join the Tech Team of the FCN. *We are looking for a Ph.D. in Environment Science, Agricultural Economics or related subject, with hands on experience in supporting the cultivation of small and marginal farmers.*
- Assign a Junior CDM Specialist to assist the Low Carbon Farming Expert and, at the same time, learn under her/him.

- EDF will finance the salary and operational costs of both these Staff members.

3.3.2. FIELD STUDIES

- Make a Technical Assessment of Baseline Emissions of current farming practices of Participating Farmers.
- Estimate the Emission Reductions that can be achieved by adopting SA practices introduced by Participant NGOs.
- Assess the Managerial Capacity of NGOs and Communities to implement a Low Carbon regime.
This can be done by Organisation Development Consultants who have a deep appreciation of NGO work.

3.3.3. TECHNOLOGIES & METHODOLOGIES

- Inventorise new or adapted Technologies that Participating Farmers can follow in their move towards Low Carbon Farming
E.g. Reduced/No Tillage, Change in Cropping Pattern, Reduced Application of Chemical Fertilizers & Pesticides, Increased use of Farm Yard Manures, Improved Composting, Anaerobic Decomposition of Farm Wastes (through Digesters), Planting/Protecting Trees, etc.
- Identify existing Methodologies or develop new ones to Monitor Emission Reductions from each of the above practices
- Undertake monitoring and estimation of Emission Reductions for the recommended Low Carbon farming technologies

3.3.4. CARBON CONTRACTS

- Develop Activity Processes and implement GPS and GIS Technologies (hardware and software) to identify each landholding of Participating Farmers and map the Discrete Plots.
ADATS/Coolie Sangha will show what has been in this regard to satisfy far more stringent and demanding requirements of A/R CDM under the UNFCCC regime.
- Obtain documents that irrefutably link each Discrete Plot to a Participating Farmer – Property/Tenure Rights
E.g. Title Deeds, Pattas, Saguvalli Chitti, DC Grant papers, Cultivation Certificates, Pahani, etc.
- Explain Carbon Contracting in a clear and transparent manner to each Participating Farmer.
- Obtain Carbon Contracts that authorise the Participant NGOs as Aggregators of Carbon Credits to deliver against forward financing.

3.3.5. PACKAGING

- It is imperative that Participant NGOs and Participating Farmers realize that the primary reason to move to Low Carbon Farming is to support better farm economics.
i.e. Small and marginal farmers they get better returns, yields and prices for the same or a lower input cost.
- The rationale to package this is that many of the input costs that were historically viewed as “Operating Costs” (e.g. synthetic fertilizer, deep ploughing, etc.) can now be viewed as “Investments” (e.g. biomass along bunds, compost application, harrowing, etc.). Participating Farmers would be working to build long term natural fertility of their soils, and also a resilience in the farm ecosystem.

- Mitigation of Green House Gases should not be the main driver. New practices should be adopted because they will result in better land management and profitability in the long run.
- Carbon Credits and associated Carbon Revenue received for any mitigation should be viewed as the proverbial “icing on the cake”.
- One could view Carbon Revenues emanating from sustainable cultivation practices as “Risk Premium” since there is always a perceived as well as real risk in changing behaviour.

3.3.6. IMPLEMENTATION

On 29 January 2010, we held a round-up meeting at the FCN Tech Team Office in Bangalore, attended by Zach, Richie, representatives from all 4 Participant NGOs, and our CDM Specialists.

Zach Willey’s observation was that expertise and capacities in the visited NGOs are much higher here when compared to many parts of the world. They already have developed SA practices. Therefore, when choosing a Standard to certify our projects, we should use the highest of them.

We agreed that our Low Carbon Farming efforts should add to the ecological capital of the regions we work in. This was not just vital for the Project to succeed, but also to showcase added benefits like conserving water, energy, soil, community, biodiversity, etc. and add value to the VERs we offer in the market. Aggressive pitching of our Emission Reductions is needed in a Buyer’s Market where they are not forced or obliged to buy VERs for compliance reasons.

Low Carbon Farming projects we take up in our respective NGOs should, for the time being, be very practical and immediately implementable. It may be best to bundle 5-6 existing Sustainable Agriculture practices that are already demonstrated and accepted by farmers into a project. Perhaps a handful of new ones can be added, provided we are sure that farmers will buy into and adopt them.

Participating Farmers have to be educated, chosen, and the Discrete Plots on which they will implement project measures delineated, mapped and overlaid on satellite imageries. Periodic monitoring through stratified sampling will be done to verify Emission Reduction and sequestration. Carbon Contracts have to be drawn up wherein Participating Farmers agree to aggregate all the tCO_{2-e} they individually generate as Emission Reductions and offer them in the market as VERs. It would be best if the Participant NGOs are the Aggregators at each project region.

Participant NGOs will prepare their “Offer Sheets” which describe the block of carbon that is being offered. This will be a snapshot of the Project, which summarises the baseline, describes the Sustainable Agriculture practices that will be undertaken, calculates the tCO_{2-e} reduced through these practices, gives a time frame, describes the monitoring and verification plan, and spells out the delivery uncertainties. An asking price of US\$ 7-8 per tCO_{2-e} would be realistic for the quality of Agriculture VERs we can generate.

Initially, in order to insure against risk of non-delivery, it may be realistic to keep the first Offer Sheets at 3-4 years.

4. THE NEXT STEPS

4.1. Participant NGOs

The below listed Network Members who have some experience/expertise in Sustainable Agriculture practices will participate in the FCN-EDF Pilot to develop Offer Sheets for about 1,000 hectares each:

- Accion Fraterna, Anantapur
- Social Education & Development Society (SEDS), Penukonda
- Timbaktu Collective (TC), Chennakothapalli
- SACRED, Bidadi
- PWDS, Melaseval, Tirunelveli district

It is clearly understood that this Pilot is not to actually implement SA practices on the holdings of small and marginal farmers. It is, instead, a Pilot to prepare such Low Carbon Farming Projects in the regions where grassroots NGOs work.

4.2. Orientation for Staff

The first step will be to take a hard look at the NGO staff. In some cases, existing agriculture extension staff will be further trained and capacitated. In others, whole new departments will be created, devoted exclusively to Low Carbon Farming.

A general orientation will be given to the entire leadership and Staff of Participant NGOs.

Participant NGOs will please share training/orientation material/modules with each other.

4.3. Calculate the Baseline

The prevailing mainstream cultivation practices of demographic groups who will participate in the Project (i.e. not the SA practices that have been recently introduced) will be studied. Methane emissions levels (tCO₂-e) from these prevailing practices will be calculated. This will be Baseline.

The Low Carbon Farming Expert at the FCN Tech Team will spend quality time in the field, and do this along with each Participant NGO. She/he will also scan published literature to arrive at these Baseline figures.

4.4. Choose Appropriate SA Practices

The next step will be to list the 5-6 Sustainable Agriculture practices that each Participant NGO has already demonstrated and farmers accept. If necessary, a few more will be added, after making sure that Participating Farmers will buy into and adopt them.

The methane Emission Reduction from these proposed SA practices will be estimated in tCO₂-e. The difference between the Baseline and Estimated Emission Reduction will be the Carbon offered in the market.

Once again, the Low Carbon Farming Expert will carry out these studies.

4.5. Create an Awareness

All the farmers in the Project villages will be educated on the mitigation/adaptation value, and economic benefits of the proposed Sustainable Agriculture practices. They will be told how their risk to erratic rainfall will reduce, input costs go down, and yields increase.

Greenhouse Gas emission and the basic science behind Climate Change will also be explained.

The math behind Emission Reduction calculations will be explained. They will be told how these could be Aggregated by the NGO, on their behalf, through Carbon Contracts they will sign. Their obligations and the NGO's role and responsibility will be clarified in a totally open and transparent manner.

This is a very important step to instil an informed participation, and ensure a sense of ownership in those who come forward.

All the Participant NGOs have a longstanding and intimate relationship with the communities they work with, and a rich expertise in awareness raising techniques. This step, which normally is a stumbling block for many an NGO, will not be difficult.

Once again, Participant NGOs will please share training/orientation material/modules with each other.

4.6. Select Participating Farmers

After that, the actual Farmers who want to participate in the EDF-FCN Pilot will be selected, and the exact Discrete Plots where SA practices will be taken up identified.

GPS Readings of the polygon corners that comprise each of these Discrete Plots will be taken. These GPS readings will be fed into a Polygon Recorder, shape maps generated, acreage calculated, and the results crosschecked.

4.7. Contract with Tristle

Tristle Technologies Pvt. Ltd. could customise the software needed for this exercise as well as for monitoring the Low Carbon Farming Pilot. Tristle will collaborate with the Low Carbon Farming Expert to overlay the shape maps onto various land use satellite imageries.

ADATS has, after more than 6 years of trial and error, streamlined processes to delineate discrete plots, and is willing to share this learning through the Tristle solutions.

4.8. Obtain Land Titles

Legal titles will be obtained for each Discrete Plot, irrefutably proving that they belong to the Participating Farmers. Documents will be scanned and recorded into the monitoring solution provided by Tristle.

4.9. Draw up Carbon Contracts

Participating Farmers will sign End User Agreements with their respective NGOs. These Carbon Contracts will authorise the Participant NGOs to aggregate all the Emission Reductions achieved through the Project and sell the accumulated tCO_{2-e} in the carbon market, on their behalf.

4.10. Prepare Offer Sheets

Each Participant NGO will prepare an Offer Sheet for a 3-4 year Project covering about 1,000 hectares. These will be presented to Buyers who are willing to pay upfront for VERs that will be generated through the planned SA practices.

4.11. Budget

Each Participant NGO will make a realistic Budget to carry out the above listed 10 steps – i.e. transaction costs to prepare this Pilot. Available sources and uncovered deficits will be clearly indicated.

Richie Ahuja and Ram Esteves will coordinate efforts to find resources.

5. ISSUES TO WORK THROUGH

5.1. Duration of the FCN-EDF Pilot

If preparations are completed and Offer Sheets ready before the next planting season, we have less than 6 months. If, on the other hand, we are targeting the 2011 planting season, this Pilot will stretch to 18 months.

5.2. Sequestration Activities

In order to not immediately get into issues of permanence and reversibility, some Participant NGOs may want to initially stick to methane reduction activities, and not sequestration (tree planting, measuring soil carbon, etc.).

However, a capacity to undertake sequestration activities should be quickly built up. Gains in tCO_{2-e} per hectare are maximised by counting sequestration in trees. If pro-poor Low Carbon Farming projects opt for fruit, fuel and fodder trees that will not be cut down (i.e. non-lumber species), there will be no reversibility issue.

We should aim to quickly maximize value by stacking the carbon gains from the same piece of land. That will happen by altering more than one practice. When Participating Farmers are going to change cultivation practices through participation in the project, an extra push could convince them to maximum carbon benefits.

5.3. Standards & Validation

There are several Standards for quantifying (calculating) Estimated Emission Reductions through the Low Carbon Farming activities we propagate. The Duke Standard, described in the handbook co-authored by Zach Willey, is one such filter.

In this paper, we have merely opined that we would choose the highest one since the quality of our Sustainable Agriculture practices, intimacy with communities and ability to create a positive awareness seem to be fairly high. We only need to capacitate our organisations to develop an assured delivery capacity.

One of the first tasks of the Low Carbon Farming Expert we appoint will be to study these different Standards and choose appropriate ones for each Participant NGO.

The next step would be to work out the Validation details.

5.4. Monitoring & Verification

Monitoring parameters, periodicity, etc. will largely depend on the Standards used at each Participant NGO's region of work. However, there will be some commonalities that apply to all Low Carbon Farming projects, and these will be taken care of by the Tristle solutions.

Verification will depend on the Monitoring Plan contained in the Offer Sheet.

5.5. Finding a Low Carbon Farming Expert

This FCN-EDF Pilot cannot take off without a full time Expert in Low Carbon Farming at the Tech Team who would spend quality time in the field with Participant NGOs and Participating Farmers, and also take overall responsibility. It is therefore imperative that we immediately find a person.

Richie Ahuja will orient this person to the science behind Low Carbon Farming, and Ram Esteves will mentor her/him in NGO dynamics.

5.6. Finances

There still is a final issue that the FCN, EDF, and especially Participant NGOs have to seriously consider before taking this collaboration forward.

Though we agree, in principle, that Carbon Revenue should be viewed as the "icing on the cake", and that new practices should be adopted because they will result in better land management and long term profitability, this stance is difficult to build a strategy upon.

Most grassroots NGOs have the resources to experiment with new Sustainable Agriculture practices, demonstrate on a limited number of fields, and undergo a learning phase. But no one has enough money to scale up these practices to significant levels covering many thousands of families/hectares.

The Budget referred to in paragraph 4.11. above is not to actually carry out Sustainable Agriculture practices on 1,000 hectares. Actual implementation of the Low Carbon Farming Project, after the Offer Sheets are accepted by a VER Buyer, will need to be financed through the own efforts of Participating Farmers, Government subsidies, and Carbon Revenues from the Forward Sale of VERs.

We realise that this is not going to be easy since, at a guesstimate, our SA practices will result in a reduction of 1.5 to 2 tCO_{2-e} per acre. At a price of even US\$ 8 per VER, this works out to Rs 370 to Rs 550 per acre per annum. Will this be enough of an incentive for Participating Farmers to switch over from mainstream practices and sign carbon contracts?