

CLIMATE FINANCE. WHAT DO FARMERS NEED.

E-Magazine

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CLIMATE FINANCE. WHAT DO FARMERS NEED.

Martin Bwalya AND Inge Herman Rydland
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Just like policies, appropriate technologies, among others, climate finance is an integral success factor to widespread adoption and sustained practicing of climate smart agriculture (CSA). For various reasons, the issue of climate finance is no ordinary issue and cannot be left to chance.

This is particularly important in the context of agriculture (farming) in the developing world. Majority of the farming communities in developing countries are smallholders based in rural areas. They are faced with limited flexibility in terms of capital resources, and are therefore highly vulnerable to climate change.

Here, we take the view of climate finance that is broader than just the development aid flows from developed to developing countries. Equally significant and impactful is the domestic resource base – public and private including re-investment within the farming industry.

Therefore, appreciating farmers' aspirations, the challenges and opportunities they may have in the area of climate finance is important in ensuring that financing policies and tools are aligned and are responsive to the (special) needs of the farmers and farming industry. Here we underline two fundamental principles:

The first principle is that climate financing to agriculture is not a charity undertaking but rather an investment. The agricultural landscape even in developing countries is increasingly transforming from largely subsistence farming to an economic activity for business and wealth creation. On the other hand, greater success in climate

financing contribution to enhanced and expended practicing of CSA is important for the greater public good and therefore directly in the interest of all – through impact on economic growth and inclusive development. This is why, not just volumes coming through climate financing are important, but also the quality (appropriateness, effective and efficiency) of financing – in terms of mechanisms and decision making tools to spur and enable the transition towards low-carbon, climate-resilient growth and development through capacity building, R&D and economic development.

The second principle in the context of emerging issues, is that results-based financing favours accountability and “value-for-money”. Climate smart agriculture should translate into farming systems that are resilient and viable at household, community and landscape levels. Scaling-up and shifting to practicing CSA is transformational and by definition will require time to yield results and to make an impact. This is an important consideration when looking at climate finance to farming.

In the context of these two principles, we consider the following specific needs of farmers to ensure a transformation of systems in medium-to-long terms with regard to results and impact:

- a) At household/farm and community level, it will be essential that farmers and farming can link to business. Business and wealth creation must become a central motivation for farming. This can happen through promoting business friendly policies as well as infrastructure, technologies and skills (technical

and managerial) for farmers and entrepreneurs. This can include catalytic smart subsidies especially on production-productivity enhancements interventions. Factoring in special “public good” financing requirements for innovation and piloting are important in climate finance.

b) Climate financing to agriculture must be generated from outside the agricultural sector. The scope for re-investment from within the agricultural system (including agro-industry) is, however, huge. This also holds true in smallholder farming systems. Accordingly, sourcing finances from private sector can incentivise increased and sustained re-investment within the agricultural industry. This is important also in the light of, e.g. Africa’s resolve to expend that domestic window for investment and development financing.

c) In the broad equation on comprehensive and integrated mitigation-adaptation, responses to and initiatives on climate change farming present one of the most delicate links. It could be the weakest link with failure having adverse consequences for the entire humanity – from food security through to ecosystem resilience. On the other hand, it is a low hanging fruit for great success in mitigation-adaptation initiatives. CSA also offers assurances on sustainable success. In this light, one important success factor is direct engagement and interaction with farmers in the design and rolling out of financing instruments, especially those under the UN systems – e.g. the Green Climate

Fund. A prerequisite is institutionally organised farmers associations and networks in possession of evidence-based knowledge necessary to trigger the climate finance instruments. It is critical that such farmer representations are linked to grassroots (community level) farmer constituencies.

d) Appreciating the knowledge-intensive nature of practicing CSA, one critical farmer need is robust infrastructure that provides access to quality (could be privatized) extension and advisory services. This may require public-private collaboration both in terms of financing as well as rallying relevant expert capacity

e) The issue of risks and insurance in agriculture climate finance have been widely examined. Weather index insurance unlocks the productive potential of farmers. It can help unlock farmers’ access to especially the private sector climate investment finance. Therefore, the main point for discussion is customized weather index based insurance for the different farmer needs and circumstances.

In conclusion, it is important to recognise that standard climate financing principles, instruments and operationalisation modalities may omit financing to a critical and significantly large constituency of smallholder farmers which also include a lot of women farmers. Deliberate and in some cases affirmative action will be necessary to make this to happen. The benefits will be for the greater humanity.



WHAT IS CLIMATE FINANCE?

Managing
the unavoidable...avoiding
the unmanageable

Gernot Laganda

LEAD TECHNICAL ADVISOR / CLIMATE
CHANGE - UN INTERNATIONAL FUND FOR
AGRICULTURAL DEVELOPMENT

W

Why do we need climate finance?

A world that is out of balance with atmospheric carbon is a world that must adapt.

I know what you are thinking – an increase of two degrees – it doesn't sound like much, right?

But two degrees is the average worldwide. It will be higher in some places, and lower in others. Dry places in Africa will get drier. Wet places in Asia will get wetter. A two degrees warmer world is a world with a 50/50 risk that coral reefs will bleach, and fish stock will migrate.

For many small island states, this means that they would lose most of their economic revenues from tourism and fisheries. Mountainous countries such as Bhutan, which experience the melting of glaciers, would experience water shortages and severe difficulties with their hydropower production.

We live in a very uncertain world.

A world that needs investment, but in things we haven't invested in before, or at least never as a priority. Adapting to a world that is two degrees warmer will cost money. Green technologies are expensive.

"We don't know what climate finance is...but we are sure we need a lot of it".

So what is climate finance? There are three prevailing rationales for providing climate finance:

- **Climate justice:** Transfer of public resources from north to south to cover the costs of dealing with the long-term impacts of Climate Change.
- **UNFCCC:** "New and additional financial resources" by developed countries for the "full incremental costs" of climate change in developing ones.
- **Broadly:** Financing for climate change mitigation and adaptation projects and programmes.

In 2014, global climate finance amounted to approximately US\$391 billion. It is made up of public and private money. The money is split between financial flows to climate change adaptation and climate change mitigation projects. To date, there is far more investment in mitigation (related mostly to energy and transport systems): US\$361 billion versus US\$25 billion.

Investing in the climate is fast becoming a popular notion in the private sector. Big businesses like Google and The Rockefeller Foundation are both providing it. But it is by no means mainstreamed. Other foundations such as the Bill and Melinda Gates Foundation have thus far stayed out of climate finance.

IFAD partner countries tap into climate finance from multiple sources. The Fund receives donations from a subset of member states who contribute to the Adaptation for Smallholder Agriculture Programme (ASAP). There is also the Global Environment Facility, Least Developed Countries Fund (LDCF), Special Climate Change Fund (SCCF) and the Adaptation Fund. IFAD uses this money to "Climate-proof" its projects, which effectively means these projects are

investing in specific activities to reduce risks from extreme weather events, adopt environmentally sustainable landscape and natural resource management practices, and sequester organic carbon.

The amount of money pledged by governments has the potential to make an incredible difference. But it needs to be accessed, used judiciously, and replenished.

How does this help smallholder farmers?

For IFAD, climate finance is used to analyse new and emerging risks. The current generation of smallholder farmers are facing a level of threats and uncertainties they've never experienced before. Understanding the risks that are emerging in a changing climate is the first step towards preparing for, and adapting to it.

Climate finance can also help to finance new and innovative technologies to manage climate risks, which have not been widely considered in the agricultural sector before. Such technology can take many forms: Solar panels to power lights and heat water; biogas units, that can turn human and animal waste into cooking

gas and fertilizer; half-moon-shaped contour bunds that help arrest erosion and turn degraded dry-lands into arable land again; early warning systems, allowing farmers to know when a flood or monsoon is coming; improved storage infrastructure, so that farmers can safely store their harvests before the rains are coming. The list is long, and these are just some of the ways that smallholders can benefit.

Perhaps the most obvious way that smallholder farmers can benefit is through improved yields. Using techniques such as conservation agriculture and agroforestry, farmland can be made more productive. Such techniques protect the agricultural soils from erosion, whilst intensifying production over a small farm area.

Take-away messages

Climate finance is out there. There's a lot of it, and the trend is rising. After Paris's COP21, there is a worldwide commitment to combat climate change and support developing countries in adopting green and resilient development pathways. IFAD is ahead of the curve in making climate finance work for smallholder farmers, but more work is needed. "Climate finan-

ce is most effective when used as an incentive to improve and adjust the approach of other public or private sector investment programmes", said Gernot Laganda, IFAD's Climate Adaptation Specialist. Basically, you take a rural development project that is under development or already active, and you mould it into a climate-smart programme through the systematic integration of climate finance.

Climate finance is a new source of financing to do development better. Organisations such as IFAD need to adjust their business processes to use it well.



ODETTE MUKANKIKO AND HER DAUGHTER SOPHIA SORTING MAIZE. ODETTE IS THE VICE-PRESIDENT OF THE COACMU MAIZE COOPERATIVE IN KIREHE, RWANDA. WITH IFAD SUPPORT, THE COOPERATIVE WAS ABLE TO FINISH BUILDING A CLIMATE-RESILIENT DRYING FACILITY, WHICH ALLOWS THEM TO MINIMIZE FOOD WASTE BY STORING MAIZE. THE POST-HARVEST AND AGRIBUSINESS SUPPORT PROJECT (PASP) HAS ALSO HELPED THE COOPERATIVE TO CONNECT WITH LARGE BUYERS IN THE NATIONAL MARKET TO SELL THEIR HARVESTED PRODUCTS.

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HOW CLIMATE FINANCE CAN CHANGE THE TRAJECTORY FOR THE WORLD'S SMALLHOLDER FARMERS

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IMPLEMENTED BY GDI AND DALBERG

Clara Colina

MEMBER OF THE DALBERG GLOBAL
DEVELOPMENT ADVISORS TEAM

Even as we see an explosion of income-boosting solutions for smallholder farmers in the developing world, climate change threatens to wipe out potential gains.

This year, El Niño has highlighted the vulnerability of smallholders, causing severe droughts in East Africa, flooding in Indonesia, and the spread of unusual crop diseases such as a coffee leaf rust in Latin America. Harsher seasons and inconsistent weather patterns result in lower yields and a reduced cash flow, illustrating that the world's smallholder farmers, who make up a majority of its poor, are likely to suffer the most from climate change.

To combat the effects of climate change, smallholder farmers will need to be equipped and trained on climate efficient technologies – such as drought resistant crop varieties and technologies like drip irrigation systems. But lack of finance is a barrier to adopting these technologies. Now, more than ever, expanding financial inclusion for smallholder farmers becomes critical to maintaining farmer livelihoods and building a climate adaptive industry.

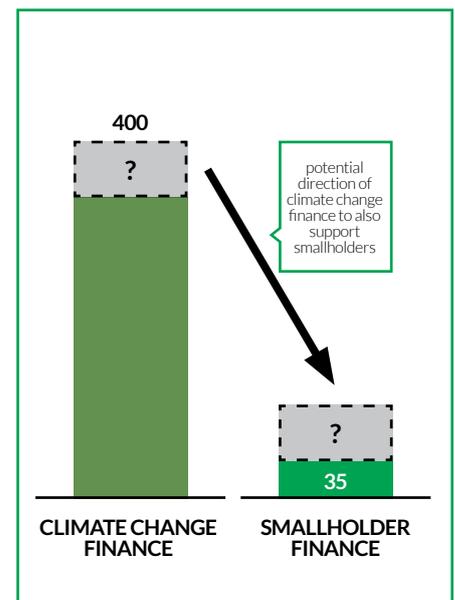
In our latest report, *Inflection Point: Unlocking growth in the era of farmer finance* – a Dalberg-conducted study published by the *Rural and Agricultural Finance Learning Lab and the Initiative for Smallholder Finance* – we described the state of the sector and called for new approaches to expand financial inclusion for smallholder farmers. While current efforts are not sufficient to meet the need, the industry can shift its trajectory upward with a concerted effort around customer centricity, progressive partnerships, and smart subsidy.

How large is the need?

Currently, over 270 million smallholder farmers in Latin America, sub-Saharan Africa, and South and Southeast Asia require over USD 200 billion in financing to grow their businesses and improve their livelihoods. Formal financial institutions and value chain actors meet less than a sixth of this need today. Doubling projected annual growth (from roughly 7% to 14%) would allow these providers to meet more than half the need by 2025.

However, providers are only accessing a portion of potential capital. In 2015, capital commitments to address climate change stood at USD 400 billion compared to just ~USD 31 billion of formal financial institution and value chain investment in smallholder finance. This represents an opportunity to direct a portion of climate change finance to simultaneously support smallholder farmers investing in improvements in farmer resilience and adoption of climate-smart cultivation methods.

IFAD's Adaptation for Smallholder Agriculture Program (ASAP) is already doing this, by funding climate resilience elements for agricultural finance initiatives. Since 2012 ASAP has channeled more than USD 300 million to eight million smallholder farmers in over 30 developing countries, financing initiatives such as mixed-crop systems, crop rotation or communal ponds. Another example is The Livelihoods Fund for Family Farming, a blended public and private vehicle that also blends in conservation finance revenue streams—e.g., carbon sequestration credits—in order to support smallholder yields and preserve natural assets.



SOURCE:
"THE GLOBAL LANDSCAPE OF CLIMATE
FINANCE," CLIMATE POLICY INITIATIVE,
2015; DALBERG ANALYSIS.

Unlocking growth in farmer finance

We need to see more of these types of initiatives, but unlocking growth smallholder and climate finance will require customer-centric approaches to design products that address adoption barriers, progressive partnerships that enable risk and cost sharing, and smart subsidy: targeted blending of finance to magnify the impact of public and philanthropic funds:

1. **Customer Centricity:** Putting customers in the driver's seat when developing financial solutions can help translate customer need into customer demand. For example, the Climate Adaptation Fund Pilot in Isiolo County, Kenya worked hand in hand with local communities to help identify solutions to strengthen a household's adaptive capacity, and prioritize those with greatest potential for customer uptake. Similarly, the Rural Resilience Initiative (R4) insurance pilot in Ethiopia used smart design techniques to develop a two payment option insurance product: paying with labor or paying in cash. This made insurance accessible to the

poorest farmers who were able and willing to work for coverage.

2. **Progressive Partnerships:** Financially sustainable provision of smallholder finance requires more and deeper partnerships to share cost and risks. The Agriculture and Climate Risk Enterprise (ACRE Africa), addresses the high price of weather-indexed crop insurance for smallholders by building these types of partnerships: insurers underwrite products that are distributed and pre-financed by value chain partners like input providers. The distributors bear the cost of marketing and collecting payments from smallholders, lowering overall cost to serve and increasing reach.
3. **Smart Subsidy:** Smart subsidy is essentially about leveraging more private investment via donor and public funding targeted at clearly diagnosed barriers to the market, from catalytic funding for entry/discovery costs to ongoing risk-mitigation efforts as a public good. Climate change funding targeted at developing or de-risking smallholder financial solutions can crowd in private sector investment.

WHAT HAPPENS NEXT?

WHILE THE PROJECTED EFFECTS OF CLIMATE CHANGE COULD BE DISASTROUS FOR SMALLHOLDER FARMERS WITHOUT INTERVENTION, UNLOCKING FINANCE CAN HELP THEM ADOPT CLIMATE-SMART TECHNIQUES, AND EVEN ACHIEVE YIELD GAINS OVER TODAY'S CURRENT UNDER-PRODUCTION. WE ARE CALLING FOR COLLABORATIVE AND CONCERTED EFFORT ACROSS THE SMALLHOLDER FINANCE SECTOR, AND WE THINK CLIMATE FINANCE NEEDS TO BE PART OF THIS EFFORT TO PROTECT AND IMPROVE THE LIVELIHOODS OF MILLIONS OF FARMING HOUSEHOLDS.



CLIMATE FINANCE!

Sok Sotha

MANAGING DIRECTOR, CFAP CAMBODIA

A

Agriculture is a major sector in Cambodia which represent of about 82% of the total population, most of them are smallholder farmers and live

in rural area. They still depend much on rain water. Irrigation system is very poor and there is limited or no water in dry season that could allow farmers continue their farming activities in a year round. Rain water is about 1400-1500mm Ave./Yr. Even though, the country adopted itself as agricultural country, but Climate Services in agriculture are so poor. Generally, smallholder farmers could not get access to services, knowledge and finance properly. Cambodian agriculture is still unproductive compare to neighboring countries in the region.

CFAP addresses the issues on climate change to bring Innovation, Adaptation, Resilience, Market and getting access of farmers to finance for agricultural sustainability and profits, however this is not always easy because there is very limited or no regular fund to grant activities. We provided knowledge and skills through its capacity building programs (trainings and knowledge sharing workshops) to FO leaders and producer members. Farmers generally could not get access to proper finance (credit) with low interest rate to do their farming profitably while they do agriculture in a more organic driven, therefore production cost (expense) is always high with no proper balance in between expenses and incomes, that's why farmers always loss and cause a migration from the villages to find non-agricultural jobs in the city.

Base on our various results of studies conducted at the village, sub-national and national level, we learned that soil quality is poorer in Cambodia; many farmers could not get access to water source, most existing water source such as natural lakes, rivers, canals are disappearing year to year and there is limited or no water in dry season. Open-wells become very dry and Ground water in most places is deeper (35-60 meters depth) to get water compared to last two decades (5-15meter depth). When natural things have changed, it is easy to get flooding when there's rain, thus to destroy farmers' crops, new pests happened, the temperature is hotter 25-40 Celsius, quick change affected vegetable, crops and animals as well as financial status while farmers are poor. Small farmers could not get access to weather forecast info, because they could not use technology (of course Rada station...,but it seems not accessible. Only about 10% amongst 40% of irrigation system in Cambodia is utilized, especially in dry season. Farmers generally could not adapt themselves to the quick changes of climate as they still believe on old information and still keep existing seeds generations, there is no habit of buying good seeds every year, in general. This is because there is no nearby good seeds company from their houses and also the living condition of farmers is low which normally force them saving to survive and cause problems of malnutrition finally. Generally, farmers are shy, especially women farmers to ask for information from advisors or resource persons.

Farmers now need regular information regarding the changes of climate, at least two times/year in order them to prepare cropping calendar well. This will enable them to have ideas to talk with Researchers, Government and Development agencies. In return, the Researchers, Government and Development agencies must express their willingness and commitment to work with farmers' organizations directly. Farmers' organizations must play a key role as produces suppliers to the consumers. The world must profit agriculture.

CFAP always advise farmers to change from more using of late and medium varieties to early varieties, grow in a rotation system by following the cropping calendar and technical protocols, thus to modernize gradually their farming practices that could stand with the current and quick changes of climate. We always raise the awareness on climate changes and its negative impacts to farmers in various meetings and workshops.

We wanted to see farmers and farmers' organizations get access to support and opportunity as follow:-

- Policy on climate change finance farmers and farmers' organizations directly as they are in the frontier of impacts from climate changes.
- Produces suppliers to clients, thus to initiate economic for themselves with sustainability in the future.
- FOs need more updated and specialized knowledge on climate change to disseminate info to farmers directly and on time
- Farmers get access to services on soil quality improvement,
- Knowledge on water management
- Farmers get access to water source to irrigate their crops in a year round,
- Good seeds
- Meteo information
- SMS to farmers through a Cell Phone
- Involved in meetings and or workshops on Climate Change at (Sub-national, National and International Level).





FARMERS' STRONG ROLE AS CARBON REMOVERS SHOULD BE APPRECIATED BY CLIMATE FINANCE

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Liisa Pietola

HEAD OF ENVIRONMENTAL AFFAIRS FOR
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WORKING PARTY ON THE ENVIRONMENT AT
COPA-COGECA

Farmers' everyday work is to produce biomasses, which actually is to sequester carbon dioxide (CO₂) from atmosphere. By cultivating soils for vigorous growth farmers enhance photosynthesis.

It's time to really recognize the farmers' role in carbon sequestration: we make the fields and forests grow, we utilize the sun light. It's not only providing food, fiber, wood and energy, but it's also providing oxygen and helping to solve the problem of the climate change.

Photosynthesis is the process by which plants use the energy from sunlight, carbon dioxide from atmosphere and water from soils to produce biomass. Dry biomass contains 45 % carbon, originating from atmosphere. Crop yield of 5 tons /ha consists of 2.3 tons/ha carbon (C) and 8.3 tons/ha carbon dioxide (CO₂).

Humans have increased atmospheric CO₂ concentration by a third since the beginning of industrial revolution. This is the most important cause of climate change. To stop the climate change we need to remove carbon dioxide from atmosphere back to the soil. The principal method for climate mitigation is photosynthesis, enhanced by crop cultivation and forestry.

But do we see this strong positive climate measure by photosynthesis, which farmers promote? Unfortunately official reporting of greenhouse gas emissions and accounting rules for removals and emissions do not recognize the carbon which is harvested and taken outside the farm. Only plant residues and remaining woody biomass is accounted, to some extent and partly by political decisions.

Where does the bound carbon in harvested biomass disappear? We see that current climate policy and accounting rules are too narrow, lacking the whole picture of recycling of elements. From bio-economical point of view, the accounting and reporting is outdated, originating from history where focus was on point-source emissions and deforestation.

The positive climate work by photosynthesis is forgotten. Current clima-

te policy of agro-forestry sectors focus on soil carbon, which is important as agreed in Paris climate negotiations on December 2015.

In addition, we need to see the whole carbon cycling, i.e. cycling of biomasses. Humans need biomasses which we can use. Therefore, we cannot exclude the carbon cycling of renewables, i.e. food, fiber and energy originating from harvested biomass. We simply cannot live here by just focusing on soil carbon. We need carbons to be able to be eaten and keeping us warm. Therefore, we need to respect the Paris outcome which gave strong support for food security, and called for carbon sequestration.

In line with Paris, climate finance should see farmers as masters in carbon sequestration. Climate finance should inspire farmers to adapt sustainable intensification. We need incentives and financial tools to promote sustainable intensification, where farmers focus on soil carbon and high yield, which results as high carbon sequestration. This means better soil management like reduced tillage, keeping soil plant covered and crop rotation. Mitigation and adaptation are realized simultaneously.

Sustainable intensification is a key for resilience of agriculture to climate change. To make most use of photosynthesis and carbon sequestration into soils, but also for our food and fiber, farmer's role as a catalyst of photosynthesis need to be accounted. Climate mitigation by carbon sequestration is an ecosystem service which cannot be efficient enough without farmers.

Therefore, our work as carbon removers should not be cancelled out. Harvesting should not reset the positive climate work for farmers. Carbon sequestration is our business.

Farmers need motivation to continue their most crucial work to mitigate climate change. We, farmers are key players, we are solution.

CLIMATE FINANCE. WHAT DO FARMERS NEED?

Prudence Ayebare
WFO WOMEN COMMITTEE, UNFFE

Globally Climate change has been crown a key concern that needs urgent attention. It has affected every living being on this planet and ecosystems, and this has got a considerable impact on the livelihoods of among many farmers.

There is a thin line between climate change and Agriculture systems in the developing countries, in every case the majority of the agricultural activities are rain-fed which has directly led to low input hence low productivity leaving a lot of Vulnerability to Agriculture sector.

It not only affects agriculture but holistically the effect goes to other sectors like roads and infrastructure, land and ecosystem, biodiversity, fisheries, energy, health and sanitation, atmosphere air pollution, forestry, wildlife and animals, human population and environment, water supply and watershed resources.

Generally the rural poor in the developing countries have felt more pinch than any other and women smallholder producers are on the front line of dealing with the impacts, but are not first in line for international climate finance.

National governments are stepping up in spite of limited resources and multiple development priorities. It is great that many positions proposals have been done to ensure the attention of climate change, decisions on adaptation, mitigation have all been arrived at but the climate financing has not been emphasized. It is urgent that financing climate change becomes the number one priority in these circumstances.

The adoption of Sustainable Agriculture in the local areas can build resilience capacity among farmers in the area, increase access to water quality and quantity, reduce fluctuating lake levels, reduce over exploitation of natural resources – caused by increased basin population and competition over natural resources, thus leading to declining fish stocks and loss of habitat and biodiversity, wetlands destruction, and forests degradation.

This would imply an improvement in bringing new land into agricultural production; increasing the cropping intensity on existing agricultural lands; and increasing yields on existing agricultural lands.

MITIGATION OPTION	BENEFITS	SOURCE
IMPROVE CROPLAND AND GRAZING MANAGEMENT	<ul style="list-style-type: none"> • INCREASE WATER STORAGE AND INFILTRATION, REDUCE WATER LOSS THROUGH RUNOFF • INCREASE SOIL MOISTURE AVAILABILITY • ENHANCE ECOSYSTEM WATER BALANCE 	MOLDEN, 2007 UNGER ET AL. 1991
MANURE APPLICATION	<ul style="list-style-type: none"> • MAINTAIN OR INCREASE SOIL ORGANIC MATTER • NUTRIENTS 	TILMAN ET AL. 2002; MILLER AND DONAHUE, 1990.
CONSERVATION AGRICULTURE	<ul style="list-style-type: none"> • REDUCES EVAPORATION 	FAO 2008e
WATER CONSERVATION AND HARVESTING	<ul style="list-style-type: none"> • THE SOIL CARBON POOL 	
EFFICIENT IRRIGATION	<ul style="list-style-type: none"> • SOIL CARBON POOL 	
TERRACES AND COUNTOUR FARMING	<ul style="list-style-type: none"> • STORAGE AND DRAINAGE 	WOCAT 2007

Farmer or Government who should finance climate?

Financing the implementation of National Adaptation Programme of Actions (NAPAs) for Developing countries should remain priority. The budget is an important tool used by government to transform society and thus achieve socio-economic development, endorsing the position of United Nations Framework convention on climate change (1994), that all countries should protect the climate system for the benefit of the present and future generations on the basis of equality and in accordance with their common but differentiated responsibilities and respective capabilities.

Climate finance is central to global efforts which reflect on a divergent position between developed and developing countries. On budget, climate change relevant spending is approximately 0.2 percent of GDP. This contrasts with that recommendation in the draft implementation strategy of the climate change policy, which estimated that around 1.6 percent of GDP needs to be spent on climate change-relevant activities.

This level of spending equates to approximately 0.2 per cent of GDP, which is in stark contrast to that recommended in the draft Implementation Strategy of the Climate Change Policy.

How to Finance

Incorporating gender awareness and gender criteria into climate financing mechanisms and strategies would likewise constitute 'smart climate finance'.

Specifically, numerous studies show that women's empowerment leads to gains in productivity, environmental sustainability and in confronting the ill effects of climate change. Gender-sensitive tools and procedures should be integrated into all areas of climate change finance.

Women's empowerment concepts should be mainstreamed within climate finance governance structures and procedures as well as within their programs during design, implementation, monitoring and evaluation.

Financing processes must be attuned to the needs of and involve the most vulnerable groups of society, including poor women and men. Such steps need to ensure the effective participation of vulnerable populations, such as women and women's groups, as key stakeholders in decision-making processes at all levels. Engage with existing and newly developed climate finance frameworks (e.g. the Paris Agreement, Dec. 2015), networks, and instruments to ensure the integration of gender perspectives within their evolving and reforming processes.

Use national-level finance tools, such as National Climate Funds (NCF) and climate finance readiness strategies to help manage, coordinate, implement and account for international and domestic climate finance. Gender-responsive budgeting can help in this by ensuring greater accountability over public resources and by promoting gender equality goals.

Such budgeting strategies can also help address gender gaps in budgets as well as emphasize the re-prioritizing of financial resources within activities in addition to increasing overall expenditure. Agriculture in developing countries must therefore undergo significant transformation in order to meet the related challenges of achieving food security and responding to climate change.

Projections based on population growth and food consumption patterns indicate that agricultural production will need to increase at least by 70% to meet demands by 2050. Most estimates also indicate that climate change is likely to reduce agricultural productivity and production stability.

CLIMATE – SMART AGRICULTURE IS THUS CRUCIAL TO ACHIEVING FUTURE FOOD SECURITY AND CLIMATE CHANGE GOALS.

(FAO, 2010)

THE SUCCESS OF CLIMATE FINANCE THROUGH ENSURING BENEFITS FOR FARMERS AND INVOLVING YOUTH

Meerim Shakirova

YPARD ASIA AND PACIFIC COORDINATION
COMMITTEE

S Starting from 2002, a plethora of climate related funds have been established with diversity of dedicated international and bilateral contributions.

Each of these has a separate mandate, objectives, and mechanisms for access. Depends on the fund and its objectives – it supports activities related to adaptation and mitigation, as well as development aims.

Climate finance plays a critical role, however despite its potential some practices remain low and inconsistent, with a lack of knowledge and institutional capacity. For example, mitigation finance activities include a market-based carbon finance, some schemes can achieve significant reduction of emissions in the initial years, and begin selling carbon credits early in the project's lifespan, some can take up to fifteen years to reach it break points. Upfront public sector funding is essential, international investors are deterred by the high risks, driven by incentives, and a few will wait for more than ten years for a return on investment. Without public funding, most of these climate finance instruments are not financially viable. In addition, it is crucial to note that “co-benefits” are more important than carbon. Farmers will not be interested by just the mitigation benefit, when they are facing severe droughts, food insecurity, floods, and poverty. Therefore, the value chain between farmers and carbon should be linked to enable farmers to be connected with the marketplace.

Consequently, long-term up-front investments is critical, because the climate finance approach does not make it easy for farmers to fall out of technical specification and therefore loose income. Farmers and local communities face constraints on financial, institutional and legal fronts, including high costs of initial adoption, poor local institutional capacity, insecure land tenure and significant risks associated with investment in new practices. Climate finance related activities must overcome these barriers and secure benefits for farmers and local communities in both the short and long-term. While carbon finance offers few benefits to farmers, it is necessary to fund projects by paying for high establishment and maintenance costs. Since carbon payments are generally not

sufficient to encourage farmers to join these projects, the non-monetary benefits from improved practices are the real keys to project success. There is a need to empower farmers, and not to tie them with complex technical specifications, and complicated regulations. This in a long-term will capture synergies between productivity, carbon sequestration, and climate resilience.

Importantly, the farmers are getting older, with a lack of youth to replace them the future of agriculture sector is uncertain, which might bring significant implications for the future development. It is therefore evident that a well-supported climate finance activities potentially could provide incentives that the sector is transformed in the eyes of the younger generation to become attractive, viable and offer real opportunities.

Young people can also play a critical role in addressing climate finance needs of farmers. Globally, there is a need for innovative approaches to climate finances, which connects rural communities to public and private finance. Potentially, the success and efficiency relies on young people's ability to innovate, involving information and communication technologies (ICT). It is clear the impact of ICTs in the value chains is diverse, and influences the market competitiveness in different ways through development of extension services and options tailored to the specific needs and constraints of the poor that is critical to maximizing participation of local communities.

Young peoples' potential in climate finance activities is prominent, which will help to create substantial entrepreneurial and innovative mechanisms in rural areas. Through the creative use of new technologies in rural development, young people will be able to scale down solutions for farmers in addressing climate finance with rewards for their incomes, communities, carbon sequestration, green growth and resilience.

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FINANCE FOR RESILIENCE HONORS FOUR WINNING IDEAS TO ACCELERATE INVESTMENTS IN SUSTAINABLE CITIES AND CLEAN ENERGY

New York, April 5, 2016 – Finance for Resilience (FiRe), a platform to crowdsourcing and champion new ideas to accelerate finance for clean energy, low-carbon infrastructure, and sustainable cities, today announced the four 2016 winners of its annual competition at the Bloomberg New Energy Finance (BNEF) Future of Energy Summit. Over 1000 energy-sector and finance leaders at the Summit voted for the top ideas from out of eight vetted finalists in a competitive pitch process. <http://bit.ly/1VScGY7>

THE INDIA LAB SELECTS FOUR INNOVATIVE IDEAS TO DRIVE FINANCE TO RENEWABLE ENERGY AND GREEN GROWTH IN INDIA

New Delhi – The India Innovation Lab for Green Finance has selected four new ideas for green finance instruments to move forward for development in the next phase of its inaugural year. Lab Members, consisting of experts from government, finance, renewable energy, and infrastructure, met on 22 February in New Delhi to vote on four ideas showing the most potential to drive more private investment and leverage public finance for India's green growth targets, out of a list of 61 strong ideas that were submitted through an open call for ideas. Ministry of New and Renewable Energy Joint Secretary Mr. Tarun Kapoor announced the winning ideas at the meeting, and applauded the swift progress made by the India Lab since its November 2015 launch. <http://bit.ly/1WPwA5E>

CARBON PRICING: BUILDING ON THE MOMENTUM OF THE PARIS AGREEMENT

The Paris climate talks in December 2015 delivered a breakthrough consensus after decades of negotiations: the collective commitment of more than 190 countries to hold planetary warming to 2 degrees Celsius or less. Less noticed, but just as important, was how the Paris Agreement accelerated action on carbon pricing – a key tool for accelerating economic transformation away from fossil fuels and toward cleaner production, improved lifestyles and reduced poverty. <http://bit.ly/1WPwD1l>

WORLD BANK CARBON FUNDS AND FACILITIES

The World Bank Carbon Finance Unit uses funds contributed by governments and companies in Organization for Economic Cooperation and Development (OECD) countries to purchase project-based greenhouse gas emission reductions in developing countries and countries with economies in transition. <http://bit.ly/1VvYq7J>

HIGH-LEVEL FORUM: THE AFRICA WE WANT IN 2030, 2063 AND BEYOND

20 April 2016, UN Headquarters, Conference Room 2, New York City, US
The Office of the Special Adviser on Africa (OSAA), the Government of Sweden and the African Union Commission (AUC) are organizing a High-level Forum on 'Early Action and Results on the 2030 Agenda for Sustainable Development'. The Forum will bring together high-level speakers and participants to focus on the synergies and complementarity of Agenda 2063 and the 2030 Agenda for Sustainable Development. It will address three themes: towards transformative economic growth and regional integration in Africa, including sustainable and decent work for youth (SDGs 8 and 9); empowering African Women and gender (SDG 5); and consolidating peace and security in Africa (SDG 16). The event will take place during the week of the High-level Ceremony of the Paris Agreement and the UN General Assembly's High-level Thematic Debate on Achieving the SDGs. <http://climate-1.iisd.org/events/>

UNGA HIGH-LEVEL THEMATIC DEBATE: ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS

21 April 2016, UN Headquarters, New York City, US
The President of the UN General Assembly (UNGA), Mogens Lykketoft, will convene this high-level thematic debate on achieving the SDGs as one of three high-level events during UNGA 70. <http://climate-1.iisd.org/events/>

HIGH-LEVEL SIGNING CEREMONY FOR PARIS AGREEMENT

22 April 2016 UN Headquarters New York City, US
A high-level signing ceremony, convened by UN Secretary-General Ban Ki-moon, will take place as a first step in implementing the Paris Agreement, which was adopted in Paris, France, on 12 December 2015. The Agreement will then be open for signature in New York, US, until 17 April 2017. Countries will also need to adopt the agreement within their own legal systems, through ratification, acceptance, approval or accession. The agreement will enter into force when joined by at least 55 countries, which together represent at least 55% of global emissions. The ceremony is taking place on International Mother Earth Day. In addition to a signing ceremony in the morning, national statements will be presented throughout the day and a High-level event on implementation will convene in the afternoon.

CLIMATE ACTION 2016

5-6 May 2016 Washington D.C., US
Announced at the 21st session of the Conference of the Parties (COP 21) to the UNFCCC, Climate Action 2016 will convene government, business and municipal leaders, civil society and academia to maintain momentum for multi-stakeholder climate implementation. This high-level gathering aims to complement and promote ongoing climate action on cities, land use, resilience, energy, transport, tools for decision makers, and finance. Organizing partners include: the World Bank; the Global Environment Facility (GEF); the Compact of Mayors; the World Business Council for Sustainable Development (WBCSD); We Mean Business; and the University of Maryland.

ADAPTATION FUTURES 2016: PRACTICES AND SOLUTIONS

10-13 May 2016 Rotterdam, Zuid-Holland, Netherlands
This conference is expected to lead to major progress in climate change adaptation, and fosters an exchange of innovative and practical ideas, experiences and insights among governments, businesses, researchers and civil society from around the world. The conference will examine and discuss the latest adaptation research, as well as have an Adaptation Practice Expo and Business Fair, which will include stands, matchmaking facilities and signing ceremonies, and showcase cutting edge adaptation projects. The conference programme will address all sectors and geographic regions, with a special focus on urban and coastal areas. Adaptation Futures 2016 is also expected to: strengthen ties between science and practice; engage communities of practice and build new partnerships; and link adaptation action to current development, investment and planning decisions. The programme will include plenary and parallel sessions, roundtables, excursions, exhibitions and side events. Adaptation Futures is the biennial conference of the Global Programme of Research on Climate Change Vulnerability, Impacts and Adaptation (PROVIA). The European Commission and the Government of the Netherlands will co-host the fourth edition of this conference.

44TH SESSIONS OF THE UNFCCC SUBSIDIARY BODIES

16-26 May 2016 Bonn, Nordrhein-Westfalen, Germany

The forty-fourth sessions of the Subsidiary Body for Implementation (SBI 44) and Subsidiary Body for Scientific and Technological Advice (SBSTA 44) as well as the first session of the Ad Hoc Working Group on the Paris Agreement (APA 1) will convene in May 2016.

G7 SUMMIT 2016

26-27 May 2016 Kashikojima, Mie Prefecture Japan

The 2016 Group of 7 (G7) Summit in Japan will bring together the leaders of Canada, France, Germany, Italy, Japan, the UK and the US to address global challenges. Under the Presidency of Japan, the 2016 Ise-Shima Summit will discuss measures to address the global economic slowdown, terrorism, the humanitarian crisis and ongoing conflicts. Separate meetings of G7 ministers will also take place through the year at various locations around Japan, including meetings of foreign, finance, agriculture, ICT, energy, education, science and technology, environment, health and transport ministers. The G7 was officially established in 1985 to facilitate economic cooperation among the world's largest industrial nations; summit meetings of the member nations began in 1975.

GLOBAL ALLIANCE FOR CLIMATE-SMART AGRICULTURE (GACSA) ANNUAL FORUM

FAO Headquarters, Rome, 14-17 June 2016

The Forum will be a dynamic gathering, where the participants share solutions, discuss challenges, and build partnerships on climate-smart agriculture. We are seeking out action-oriented stakeholders to come to both share and learn at the GACSA Annual Forum.

The event in Rome has four distinct parts. All in attendance are welcome in every session.

- June 14th - Optional Field Visit
- June 15th & 16th - GACSA Annual Forum Core Events
- June 17th - Meetings of the GACSA Action Groups
- June 17th - Meeting of the GACSA Strategic Committee

<http://www.fao.org/gacsa/annual-forum/en/>

G20 ENERGY SUSTAINABILITY WORKING GROUP MEETING #3

28 June 2016 Beijing, China

The third meeting of the Energy Sustainability Working Group under the Group of 20 (G20) Chinese Presidency will take place on 28 June, in Beijing, China. Sustainable energy issues on the Chinese Presidency's agenda include advancing the implementation of the G20 Principles of Energy Collaboration and strengthening cooperation on energy access, renewable energy and energy efficiency. The G20 is an international forum for the governments and central bank governors from 20 major economies. It includes the European Union (EU), which is represented by the European Commission and the European Central Bank, and 19 countries: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, the Russian Federation, Saudi Arabia, South Africa, South Korea, Turkey, the UK and the US.

HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT (HLPF 2016)

11-20 July 2016 UN Headquarters, New York City, US

The Fourth High-Level Political Forum on Sustainable Development (HLPF), convening under the auspices of the UN Economic and Social Council (ECOSOC), will take place on 11-15 July 2016, followed by a three-day ministerial meeting of the Forum on 18-20 July 2016. The theme of the 2016 session will be 'Ensuring that no one is left behind', as decided in an ECOSOC plenary session on 14 March 2016.

2016 INTERNATIONAL CONFERENCE ON SUSTAINABLE DEVELOPMENT

21-22 September 2016 Lerner Hall, Columbia University, New York City, US

The fourth annual International Conference on Sustainable Development (ICSD), on the theme 'Moving Forward: The SDGs in Practice', will bring together members of the research, policy, practice and business communities to share practical solutions for achieving the Sustainable Development Goals (SDGs) at local and national levels. The Conference will focus on four thematic areas: Innovation in Technology and Governance; Data (data systems, gaps, how to collect); The Science-Policy-Implementation Interface; and Education and Training. The main topics for discussion will be: Low Carbon Urban Development; Socially Inclusive Economic Growth; Agriculture, Food Security and Nutrition; and Disaster Resiliency and Adaptation. Registration to participate is open until 1 September 2016.

CLIMATE CHANCE: A SUMMIT DEDICATED TO CONCRETE ACTION

26-28 September 2016 Nantes, Pays De La Loire, France

The CLIMATE CHANCE summit will address, inter alia, the link between climate and development, a new framework for the sustainable city, financing climate action, and mobilizing local actors and the younger generation. It will also discuss the topics of adaptation, territorial planning, economy and employment, territorial cooperation, forest, transport and energy. The conference is expected to encourage the sharing experiences and innovations, culminate in a global plan of action, and reiterate the importance of non-state actors in the fight against climate change.

2016 UNEP FI GLOBAL ROUNDTABLE AND ANNUAL GENERAL MEETING

25-27 October 2016 Dubai, United Arab Emirates

The 2016 UN Environment Programme Finance Initiative (UNEP FI) Global Roundtable and Annual General Meeting will be hosted by the Ministry of Climate Change and Environment of the United Arab Emirates (UAE), with support from the UAE Central Bank. The events will bring together finance stakeholders from various sectors, including government, civil society and the UN, to discuss the role of the global financial sector in addressing the sustainable development and climate change agendas. Topics to be addressed during the two-day Global Roundtable, linked to select sustainable development goals (SDGs), include: climate change mitigation and decarbonizing finance (SDG 13); resilient and sustainable cities and communities (SDG 11); clean energy and water (SDGs 6 and 7); and financing small and medium-sized enterprises (SDG 8). Plenary sessions are planned on: green Islamic finance; policy and regulatory frameworks for a sustainable financial system; and sustainable finance innovations.

UNFCCC COP 22

7-18 November 2016, Marrakesh, Marrakech, Morocco

The 22nd session of the Conference of the Parties (COP 22) to the UNFCCC is expected to take place in from 7-18 November 2016. Morocco has offered to host this COP.



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