



AFRICAN FORUM

100 INNOVATIONS FOR SUSTAINABLE DEVELOPMENT

Paris, 5 December 2013



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PRESS RELEASE

France supports innovation in Africa

On 5 December 2013 from 8.30 a.m. to 12.30 p.m., the French Ministry of Foreign Affairs, on the initiative of the Minister Delegate for Development, Pascal Canfin, will hold the African Forum – 100 Innovations for Sustainable Development, in association with the Agence française de développement (AFD, the French agency for development).

Organised alongside the Élysée Summit for Peace and Security in Africa, this forum will showcase innovations in the field of sustainable development, designed by African men and women. These innovations have already been implemented locally to improve daily life. They concern, in particular, recycling of raw materials, waste recovery, housing construction techniques, education and healthcare.

According to Pascal Canfin, “the aim of this Forum is to highlight the work of those who are driving African innovation. All of these innovations offer solutions to fulfil concrete everyday needs. They contribute to both poverty alleviation and environmental protection. This forum will be an opportunity for the innovators to meet new partners to spread the impact of their initiatives.”

When the 100 Innovations for Sustainable Development call for proposals was launched in September 2013, more than 800 applications were received in the month that followed.

Those 800 applications were examined by 45 development specialists from AFD, then by a selection panel composed of three key figures from the field of development: Winny Byanyima, Executive Director of OXFAM International; Malamine Koné, founder, Chairman and CEO of Airness; and Jean-Michel Severino, CEO of Investisseurs et Partenaires Conseil and former CEO of AFD.

This work led to the selection of 100 applications, which will receive official recognition from the French Ministry of Foreign Affairs, increasing the overall visibility of the innovations, and facilitating their dissemination and the search for public or private funding. 21 innovations will be presented by their developers in Paris on 5 December, to an audience of institutional representatives, public and private investors, researchers and NGO representatives.

Infographics offering further information on these 21 innovations will be available from 5 December 2013 on the websites of AFD (www.afd.fr) and the French Ministry of Foreign Affairs (www.diplomatie.gouv.fr).

According to Anne Paugam, CEO of AFD, “the innovations presented during the Forum reflect the dynamism of the African continent. The role of the Agence française de développement is not only to enhance and support them: it should make innovation one of its trademarks, in order to be able, with its partners, to rise to the new challenges of sustainable development.”

During the forum, there will also be a presentation of the outcomes of the Innovation and Development project, assigned by the Minister Delegate for Development to Emmanuel Faber, Vice-Chairman and Deputy General Manager of Danone, and Jay Naidoo, a former South African government minister under Nelson Mandela.

Press and accreditation contacts

Private Office of the Minister Delegate for Development

Frédérique Tarride: +33 (0)1 43 17 65 53 or frederique.tarride@diplomatie.gouv.fr

Agence française de développement (AFD)

Magali Mévellec: +33 (0)1 53 44 40 31 or mevellecm@afd.fr



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USER GUIDE

Key dates

16 September 2013: call for applications launched by Pascal Canfin via the website www.diplomatie.gouv.fr

15 October 2013: end of application period and start of procedure to select 100 innovations

5 December 2013: African Forum – 100 Innovations for Sustainable Development

Application criteria

Applicants must:

- be a citizen of an African country;
- be a resident of Africa;
- have developed and implemented an innovation (social, environmental, technological, financial, economic, etc.) that contributes to achieving sustainable development objectives;
- have developed and implemented an innovation (social, environmental, technological, financial, economic, etc.) that contributes to achieving sustainable development objectives;

Selection of the 100 innovations

The 800 applications received in the course of one month were examined by a team of 45 development specialists from the Agence française du développement (AFD) and evaluated on the basis of five criteria:

- innovation for sustainable development;
- quantitative and qualitative impact;
- feasibility and viability;
- replication;
- overall effectiveness and consistency.

100 applications were then selected by a panel composed of three key figures from the field of development: Winny Byanyima, Executive Director of OXFAM International; Malamine Koné, founder, Chairman and CEO of Airness; and Jean-Michel Severino, CEO of Investisseurs et Partenaires and former CEO of AFD.

More information on the innovations

Infographics on the innovations will be available from 5 December 2013 on the following websites: www.afd.fr and www.diplomatie.gouv.fr

Future of the 100 innovations

The 100 applications selected will receive official recognition from the French Ministry of Foreign Affairs, increasing the overall visibility of the innovations, and facilitating their dissemination and the search for public or private funding. 21 innovations will be presented by their developers in Paris on 5 December, to an audience of institutional representatives, public and private investors, researchers and NGO representatives.



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KEY FIGURES

800 applications received following a call for proposals launched in September 2013

9 sectors covered by the call for proposals:

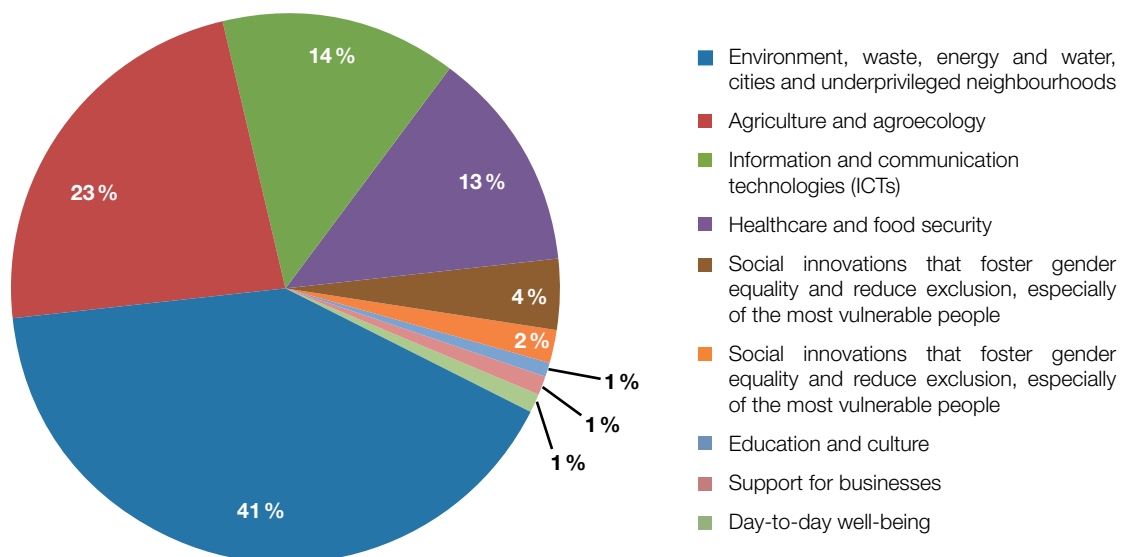
- environment, waste, energy and water, cities and underprivileged neighbourhoods;
- agriculture and agroecology;
- healthcare and food security;
- information and communication technologies (ICTs);
- social innovations that foster gender equality and reduce exclusion, especially of the most vulnerable people;
- financial innovations with a strong social focus;
- education and culture;
- day-to-day well-being;
- support for businesses.

100 innovations selected

33 countries represented by the 100 innovations selected

21 innovations presented on 5 December 2013 in Paris

Distribution of projects by sector





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SELECTION OF THE 100 INNOVATIONS

Classification of innovations

Environment, waste, energy and water, cities and disadvantaged urban areas: **ENV**

Agriculture and agroecology: **AGR**

Information and Communication Technologies (ICT): **ICT**

Health and food security: **SAN**

Social innovations conducive to gender equality and alleviating the social exclusion of the most vulnerable members of society: **INSOC**

Financial innovations with a social impact: **INFIN**

Education and culture: **EDU**

Support for private enterprise: **ENTR**

Day-to-day wellbeing: **BEQ**

AGR – Benin – Additive Layer Manufacturing with Africa (AWA)

A manufacturing process using wire or plastic powder. Easy to access, fast, straightforward and economical. It involves fusing the material layer by layer until the desired shape is produced.

NZAMUJO Godfrey: gnezamujo@yahoo.com

SONGHAI: www.songhai.org

SAN – Benin – Processing edible insects

The project encourages the domestication and processing of edible insects as an alternative to meat in order to combat malnutrition and contribute to food security in the region.

TCHIBOZO Séverin: tchisev@yahoo.fr

Centre de recherche pour la gestion de la biodiversité (CRGB, centre for research into biodiversity management): www.crgbbj.org

AGR – Benin – Rehabilitation of the Ouankou waterway

Reconstitution of 2 km of previously destroyed gallery forest to ensure satisfactory water flow and promote farming, beekeeping, craftwork and fruit picking.

AGNORO Maliki: agnoromaliki@gmail.com

Jura-Africa Benin: www.jura-afrique.ch/JAbenin/index.html

ENV – Benin – Sitatunga Valley green museum

A facility dedicated to the introduction of the public to the local small wild fauna. The aim is to highlight the value of wetland biodiversity, educate the general public and generate resources for the reserve.

KOUDERIN Kotcholé Martial: martial.kouderin@credi-ong.org

Regional centre for research and education for integrated development: www.credi-ong.org

INNSOC – Botswana – Solar Ear hearing aid

See *summary datasheet*

NYIRENDA-ZABULA Modesta: chiza@ivaluenet.com

Solar Ear - Global

ENV – Burkina Faso – Concert'Eau: access to drinking water in rural areas

The provision of access to drinking water for the remotest populations in Burkina Faso and Africa generally, by installing Concert'Eau kits, a system for the purification of water using ultrafiltration membranes.

TAPSOBA Issa: issanaba@yahoo.fr

E.T.I.T

ENV – Burkina Faso – Gafreh plastic bag recycling facility

See *summary datasheet*

OUEDRAOGO Haoua: gafreh@yahoo.fr

Groupe d'action des femmes pour la relance économique du Houet (Gafreh, Women's action group for the reinvigoration of the Houet economy): www.gafreh.org

ICT – Burkina Faso – SmartyBox: an innovative telecommunications platform

A low-cost, freeware-based system for quick, straightforward implementation of innovative telephony services for an organisation or a community.

SONDE Amadou: asonde@advencya.com

Advencya Technologies

AGR – Burkina Faso – Hybrid bread oven

A solar oven that reduces the consumption of wood for baking bread and suitable for use in semi-rural areas for production of small loaves, avoiding the need for ancillary machinery (such as kneaders) and reducing investment.

ILBOUDO William: william@isomet-bf.com

Isomet sarl: www.isomet-bf.com

AGR – Burkina Faso – Multipurpose crusher for cattle and poultry feed

A highly efficient crushing plant that enables farm by-products and plant cover (millet, sorghum, etc.) to be reused to make feed for cattle and poultry.

ROUAMBA Tibila Oumar: entreprisekato@gmail.com

KATO ! SARL

ENV – Burkina Faso – Nubian arches for the Sahel

The Nubian arch is an alternative construction method economical of energy and materials which does not create situations of dependency. The project primes the pump for local markets and builds the actors' capacity.

YOULOU Séri: seri.youlou@lavoutenubienne.org

Association la voûte nubienne (Nubian arch association): www.lavoutenubienne.org

ENV – Burkina Faso – Protected area conservation

Sustainable, participatory management of protected forests that are highly anthropised and threatened with extinction due to unsuitable activities (forest clearance, brush burning, poaching, etc.).

KARAMA Mamadou: mfkarama@yahoo.fr

Association de gestion des ressources naturelles et de faune de la Comoé-Léraba (AGEREF Comoé-Léraba, association for the management of the natural resources and fauna in the Komoé-Léraba area): www.agerefcl.org

SAN – Burkina Faso – Voice-activated interactive health platform

A trilingual (French, Moré and Dioula), voice-activated, interactive platform for health service employees and users with an interface for statistical analysis of the data gathered from callers.

SANOU Kouintané Jean-Michel: michel.sanou@gmail.com

AGR – Burkina Faso – Warrantage

A system of credit available to producers in rural areas which provides funds with farm produce inventory as collateral. This innovation helps reduce the obligation to sell off cereals in periods when prices are low.

SOMDA Simplicie: sossibf@fasonet.bf

SOS Sahel International Burkina Faso: www.sossahelburkina.org

AGR – Burkina Faso – Wégoubri, Sahel countryside enclosures

This concept for the creation of field enclosures is based on the creation of enclosed areas under joint ownership including both individual and communal plots of which the management is organised by a land ownership grouping composed of beneficiaries.

GIRARD Henri: eau.terre.verdure@gmail.com

Terre verte: www.eauterreverdure.org

ENV – Burundi – Environmentally compatible organic briquettes

These briquettes combine wood chips, parchment and other organic by-products such as bagasse to form a substitute for wood and charcoal.

RWEMERA Claver: loicqueen@yahoo.fr

Biofuel Moso

ENV – Cameroon – Cleantech for lighting and employment in rural areas

An LED lamp (Nuru Lamp) containing a rechargeable battery for use with the POWERCycle, the first pedal-driven electricity generator marketed anywhere in the world.

NDONGSOK Durando: d.ndongsok@s2-gmbh.com

S2 Services Sarl: www.s2-gmbh.com

ENV – Cameroon – Decentralised rural electrification

A 4 kW non-grid solar micro-plant powering a dispensary and a school. Low-consumption LED lights are installed in homes, for which the batteries are charged using a charging station.

MOULOUNDOU Émile: emile.mouloundou@schneider-electric.com

Schneider Electric Cameroon: www.schneider-electric.cm

INNFIN – Cameroon – Energy and Microfinance Programme

See summary datasheet

EKOE René Pierrot: rene-pierrot.ekoe@schneider-electric.com

PAMIGA and Schneider Electric Cameroon: www.pamiga.org, www.schneider-electric.com

ICT – Cameroon – EPICAM (Épidémiologie au Cameroun/Epidemiology in Cameroon)

An integrated, digital system for the surveillance of tuberculosis for improved monitoring, patient care and circulation of information among health professionals.

SOSSO Maurice Aurélien: sossomaurice@yahoo.fr

UMMISCO-LIRIMA, Yaoundé University I: www.lirima.uninet.cm/

SAN – Cameroon – Speed Pharma

An information network with a web platform and a rapid procurement and delivery service to optimise drug inventories and availability.

ZOGO MVOGO Athanase: zogomvogo.sag@gmail.com

ENV – Cape Verde – Juabox, electricity for all

An autonomous, innovative “plug & play” solar power system offering access to electricity.

SEMEDO Ana: ana.semedo@sp2a.com

SP2A Energies: www.sp2a.com

SAN – Central African Republic – Natural medicine against dental caries

Obtained from a combination of three plants – garlic, sugarcane and oil palm – this natural medicine helps prevent caries and a range of bucco-dental conditions.

BIDIMU Kabuya: bidtrade2002@yahoo.co.uk

Nsanga Lubangu centre for research into traditional medicines

ENV – Chad – Sustainable Moringa management

Processing and production of *Moringa oleifera* leaves by groups of women to help reduce maternal and child malnutrition rates

YOKIDINAN Saingaral: aapprodilom@yahoo.fr

Association pour la promotion des Initiatives locales dans le Mandoul (APRODILOM, association for the promotion of local initiatives locales in the Mandoul region)

ENV – Comoros – WataSol potabilisation system

Domestic potabilisation of water using a participatory approach and local, autonomous and inexpensive production of a sodium hypochlorite solution based around the WataSol electrolyser.

NOURDINE ALI Mardhuya Hikmata: hikmat.nourdine@2-mains.org

Deux Mains: www.2-mains.org

ICT – Côte d'Ivoire – Acturoutes: continuous live road traffic information

The gathering, processing and distribution of road traffic information for a range of media in real time and continuously. The project is a decision-aid for local authorities faced with traffic problems.

KOUAME Barthélémy: barthelek@acturoutes.info

Acturoutes: www.acturoutes.info

ICT – Côte d'Ivoire – Cicommerce (Côte d'Ivoire commerce)

A commercial information network and on-line market platform aimed at amplifying the impact of new technology on Côte d'Ivoire commerce and the living standards of the most impoverished population groups.

SOKOTY Koffi Christian: sokotykoffi@yahoo.fr

Cicommerce (subsidiary of ATS): www.cicommerce.net

AGR – Côte d'Ivoire – Cocoa waste vermicomposting

The processing of cocoa production waste to make organic fertiliser based on the use of worms to decompose waste buried in compost pits.

KONAN Kouassi Sylvain: kokouasy@yahoo.fr

Sustainable organic farming innovation network

ICT – Côte d'Ivoire – Mòh Ni Bah (“congratulations” in Baoulé)

A platform for birth registration in rural areas using mobile telephones in order to improve registration information reliability and the management of civil status records.

EHUI KHAN Jean-Delmas: ekjd06@yahoo.fr

Applied Studies and Research Centre (CERA): www.mohnibah.icoopaci.org

ICT – Côte d'Ivoire – Schoolbook

Using a web platform and SMS, this project enables school activities to be monitored, strengthening the management of school administration and training courses in the use of IT tools.

COULIBALY Pekango: pekango.coulibaly@symbiose-group.org

ENV – Côte d'Ivoire – Solrebox

Multiservice solar terminals also capable of providing Internet access via a wifi system, plus VoIP telephony service and battery charging for mobile telephones.

TIMITE Bassory: btimite@c-mobile.ci

BE BOOST AFRICA: www.beboostafrica.com

ENV – Côte d'Ivoire – WEEE recycling in Côte d'Ivoire

Reduction of harm to the environment and public health through activities for the collection and processing of electrical and electronic waste in compliance with environmental safety standards.

AOHOUI Adidhangninou Evariste: paro.jefaismapart@yahoo.fr

Programme Assainissement Recyclage Ordures (PARO, waste removal and recycling programme): cirecyclage.blogspot.com

ENV – Democratic Republic of the Congo – Forest conservation concession

A new forest concession concept combining a conservation concession with a community conservation agreement involving institutional actors, NGOs and local communities.

Conservation International

ENV – Egypt – Abu Monkar village electrification

Electrification of a desert village hitherto without connection to the grid, using clean technology.

IBRAHIM MOAWAD Hany: hany.ibrahim@schneider-electric.com

Schneider Electric Egypt SAE.: www.schneider-electric.com/site/home/index.cfm/eg

ENV – Egypt – Financial innovation at the service of industrial decontamination

Funding conversion to natural gas for 224 brickworks in the Arab Abu Saad region to reduce polluting atmospheric emissions harmful to the health of local populations.

NABIL Maysoun: maysounali2@gmail.com

Egyptian Environmental Affairs Agency (EEAA): www.eeaa.gov.eg

ENV – Ethiopia – Biogas Backpack

See *summary datasheet*

ASFAW Araya: arayaa@hoarec.org

Horn of Africa Regional Environment Centre: www.hoarec.org

ENV – Gabon – Port Gentil wastewater and excreta cleansing

An Ecosan toilet is a dry toilet with a tank for the separation of urine and faeces which can then be reused separately: as biofuel or heating fuel for example.

THIOMBIANO Bardia: bardia.thiombiano@toilettesdumonde.org

Toilettes du monde (Gabon representative office): www.toilettesdumonde.org

ENV – Ghana – Ghana Bamboo Bikes Initiative

Practical training in how to build bicycles from bamboo (reliable and flexible in use, suited to the terrain in rural areas) to encourage a spirit of entrepreneurship and provide skills to young people.

DAPAAH Bernice: bernice@ghanabamboobikes.org

Bright Generation Community Foundation: www.ghanabamboobikes.org

ENV – Ghana – Holy Cook: improved stoves for all

Holy Cook stoves are economical. They reduce charcoal consumption by 40% and avoid polluting the air inside the home.

Yaw Michael Agyei: manandman.ent@gmail.com

Man and Man Limited

ICT – Ghana – Rural Sourcing Management System

See summary datasheet

KUUNYEM Maxwell: mkuunyem@planetfinance.org

StarShea Ltd: www.starshea.com/

ENV – Ghana – Safe, economic recycling of used Fuller's earth

The manufacture of briquettes from used Fuller's earth (Spent Bleaching Earth or SBE), a highly toxic substance produced by factories making plant and industrial oils.

ANTWI-ADDO Jones: jonesantwia@hotmail.com

Adidome Ceramics Company Limited

AGR – Guinea – Africa's first Protected Geographical Indications

See summary datasheet

CAMARA Kerfalla: kerfcam@yahoo.fr

Maison guinéenne de l'entrepreneur (Guinea entrepreneurial centre): www.mge-guinee.org/

AGR – Guinea – Plot-based water management

Rehabilitation of abandoned paddy fields, making them secure and increasing their productivity with a simple, affordable system (€65) of pipes for water management in mangrove paddy fields.

CAMARA Yasso: adam_mangrove@yahoo.fr

Association pour le développement agricole de la mangrove (ADAM, association for the agricultural development of mangroves)

INNFIN – Kenya – Bangla-Pesa

See summary datasheet

DAMA Caroline: dama_caroline@yahoo.com

Koru-Kenya: koru.or.ke/bangla

ENV – Kenya – BrightBox

A battery which charges from a small solar panel and to which it is possible to connect all kinds of electrical and electronic devices. A participatory platform for technical support is available via mobile telephone.

OKECH Paul: okechpol@gmail.com

One Degree Solar: onedegreesolar.com

ICT – Liberia – 2-Way Automated Budget SMS

See *summary datasheet*

Francis Brewer: francisbrewer52@yahoo.com

Liberia Media Center

AGR – Madagascar – Access to the global plant oil market

See *summary datasheet*

RAVELOMANANTSOA Njaka: njakaraveoandry@yahoo.fr

PhileoL: www.phileol.com

SAN – Madagascar – Nutri’zaza restaurants for babies

Restaurants for babies in disadvantaged neighbourhoods serving “Koba Aina” a fortified dietary supplement developed by the Nutri’zaza association to combat infant malnutrition.

RAKOTONARIVO Mieja Vola: mieja@iris.mg

Nutri’zaza SA

SAN – Mali – Automatic condom dispensing machines

Installation of automatic dispensing machines for female and male condoms in sub-Saharan Africa, initially in Mali.

HACKO Ibrahim: rezo@afribone.net.ml

ICT – Mali – Sahel Eco

See *summary datasheet*

TANGARA Amadou: amtangs@yahoo.fr

Sahel Eco: www.saheleco.net

WEL – Mali – Solar-powered lighting for micro-credit agencies in rural areas

The iSSL+ solar-powered standard lamp is an “all-in-one” lamp that is easy to install and requires only limited maintenance. Its combination of LED and solar technology ensures optimum efficiency.

TAMBOURA Modibo: Seeba@orangemali.net

SEEBA: www.seeba-ml.com

AGR – Mali – Special rural development programme

The setting up of community centres for integrated agricultural development providing their members with training, access to agricultural finance, basic welfare cover and practical services.

KANE Moussa: cmsi98mali@yahoo.fr

Association des innovateurs pour conseil au développement (AICD, association of development consultancy innovators)

ENV – Mauritania – Bulrush charcoal

See *summary datasheet*

BEBANA Mouhamed Lemine: babana.iset@gmail.com

Institut supérieur d'enseignement technologique de Rosso (Rosso higher education technology institute): www.iset.mr

AGR – Mauritania – Toogga: adding value to the desert date palm

Based on a model for contractual farming, this project adds value to the date palm, its fruit and the entire processing and marketing supply chain, with the involvement of women.

SAID Cheikh Abdallahi: medbabasaid@gmail.com

Badelly women date pickers' cooperative: www.toogga.fr

AGR – Mauritius – Organic farming platform

FORENA has created a platform of associations to provide them with access to expertise and organic certification at reduced cost. The objective is to facilitate certified organic farming, use it as a value-added activity and ensure that its produce is affordable.

VAGHJEE Manoj: manoj@intnet.mu

Fondation Ressources et Nature (FORENA, foundation for resources and nature):
forena.jimdo.com

ENV – Morocco – Cyclo' Air Maroc

Urban, semi-urban and rural logistics services (fast, streamlined courier service, deliveries, administrative assistance for the illiterate) based exclusively around cycle transport.

BEN ABDELKRIM Mohamed Fouazi: cycloairmaroc@yahoo.fr

ENV – Morocco – Esparto weaving

A technique for the weaving of esparto and recycled plastic bags combined with traditional expertise for the production of fashion items the sale of which develops the local economy and gives greater autonomy to women.

HAJJI Faiza: contact.maroc@adf-global.org

Association du docteur Fatiha: www.adf-global.org

SAN – Morocco – Hayawi Food

An innovative type of yoghurt based on fermented milk and a pulse puree (e.g. beans, split peas) to promote the use of pulses.

HASSAR Ahmed Amine: ahmedamine1984@gmail.com

Hayawi Food

ENV – Morocco – Jiha Tinou 2020 (“my region” in Arabic and Tamazight)

Launched in 2012, the ADEREE regional strategy seeks to optimise the abilities of local actors, leverage local renewable energy resources and contribute to achieving Morocco's energy targets for the period to 2020.

MOULINE Said: dg@aderee.ma

ADEERE: www.aderee.ma

INSOC – Morocco – Organisation of the “street vendor” profession

See summary datasheet

EL BOUDRARI Lahoussine: l.elboudrari@onp.ma

National Fisheries Office: www.onp.ma

ICT – Morocco – Satellite broadband Internet for all

The aim of this project is to promote broadband Internet access and valued-added telephony services in Africa, especially in schools, hospitals and dispensaries.

BEN MALEK Abdellah: a.benmalek@wissat.net

WISSAT: www.wissat.net

AGR – Mozambique – Gostea Agroalimentar

The exploitation of fruit without commercial value (e.g. cashew apples): processing it to produce ethanol, use of the must for fruit juice, and the manufacture of a feed supplement for livestock farming.

CECCARELLI Christophe: christophe@ccgroupo.com

C&C Agroalimentar Ida: www.ccgroupo.com, www.gostea.com

ENTR – Niger – Abou construction method without formwork or clamps.

See summary datasheet

ABOU Moussa: abounack@yahoo.fr

ENV – Niger – Exploitation of water hyacinths

The collection and processing of water hyacinths by populations living on the banks of the Niger river. The production of compost cleanses the areas of land surrounding these localities and improves the yields from all farming activities.

IDE SADOU Nafissatou: naf_naf06@yahoo.fr

FAD NGO (Femmes, Actions et Développement/Women, action, development)

AGR – Niger – Fermentation chamber composter

An aerobic composting solution without turning in a semi-closed system that costs little and is easy to set up.

HASSANE BISSALA Yahaya: ainovatech@yahoo.com

Inovatech

ENV – Niger – Mali Sanoussi

The utilisation of aerial photography drones to produce mapping tools and optimise the management of groundwater, urban rainwater and environmental observation.

ADAMOUMahaman: adamou_mahaman@yahoo.fr

RAIL NGO – Niger: www.railniger.org

AGR – Niger – Remote horticulture irrigation control

A mobile-telephone-based system of automatic remote control for market garden irrigation systems.

Abdou Maman: admin@maviceu.com

TECH-INNOV SARL: <http://www.tele-irrigation.net>

INNSOC – Niger – Technical and entrepreneurial capacity-building for women

See *summary datasheet*

BARRY Bibata Glandou: barrybibata@yahoo.fr

Salon international de l'artisanat pour la femme (SAFEM, international women's craft trade show):

www.safem-niger.org

SAN – Nigeria – Connected solar-powered clinics

These “prefabricated” clinics enable a telemedicine and new technology team to implement healthcare schemes free of charge and at any location.

OYEDIPE Dolapo: dolly_orims@yahoo.com

ABC Foundation: abcprogramme.org

ENV – Nigeria – “Pay-as-you-go” Solar Energy

An individual kit for access to power (a solar panel plus a battery) connected to a system for the purchase of time via mobile telephone.

UZODINMA Iweala: uiweala@me.com

TxTlite Nigeria Ltd

ENV – Rwanda – African Renewable Energy Distributor

See *summary datasheet*

NYAKARUNDI Henry: henri@a-r-e-d.com

African Renewable Energy Distributor

AGR – Senegal – Contribution to food security in the Sahel

Raising the awareness of the local population to their ability to continue to live in the region and make them partners in the introduction of market gardening, demonstrating development possibilities to farmers.

MBAYE Babacar: bacargueye@hotmail.fr

Fédération des associations de développement communautaire (FADEC/SUD, federation of community development associations): www-fadecsud.asso-web.com

AGR – Senegal – Fertiliser-Biocide

A natural fertiliser/biocide which enriches soil and protects crops, thereby increasing farm yields. It is sold at a price 25% lower than for synthetic fertilisers.

DIENG Mamadou: biotech1Sénégal@gmail.com

ENV – Senegal – Improved oven for processing local cereals

An improved type of oven in galvanised sheet metal which will work with a range of types of fuel, including wood, butane and biogas from a biodigester.

DIABY Ibrahima: diaby.ibrahima@yahoo.fr

National ecovillage agency, Senegal: www.ecovillages.sn

ENV – Senegal – Integrated territorial climate plan for the Dakar region

A transversal strategy for responding to the issues surrounding climate change mitigation and adjustment and integrating regional development issues. This is among the first in sub-Saharan Africa.

SAMBE Ousmane: aissatou2011@gmail.com

Dakar Regional Council

ICT – Senegal – MLouma

See *summary datasheet*

SONKO Aboubacar Sidy: assonko@amandjine-consulting.com

Amandjine Consulting: www.mlouma.com

ICT – Senegal – Mobile-voting

This innovation enables citizens to vote using their mobile telephones wherever they may be, cutting the cost for government to a minimum and facilitating the organisation of elections.

SALL Mamadou: deleguesall@yahoo.fr

Gaston Berger University

ENV – Senegal – Oysters on mangrove trees

Contrary to the traditional practice of systematically cutting the roots that provide support for oysters, this project proposes the attachment of oyster strings directly to the mangrove roots.

BA Amadou: amad97@hotmail.com

Yon Ndioffor

AGR – Senegal – Rice-growing in the mangroves of Casamance

Stabilisation and development of an organic rice-growing sector based on a programme of hydro-agricultural development structured around the properties of mangrove trees for desalination, purification and preparing land for arable crops.

Henry Jean-Christophe: henry2@indiana.edu

Oceanium: www.oceaniumdakar.org

SAN – Senegal – Rift Valley Fever mosquito forecasts

A mosquito emergence prediction model developed and validated in the field and capable of producing risk maps.

NDIONE Jacques André: jacques-andre.ndione@cse.sn

Centre de suivi écologique (Environmental monitoring centre): www.cse.sn

EDU – South Africa – Obami

See *summary datasheet*

MALLINSON Barbara: smallinson@obami.com

Obami: www.obami.com

ICT – South Africa – Paperight

A network of photocopy stores to print out books rapidly, on demand and absolutely legally. Stores and publishers use the paperight.com site to print the books.

MULGREW Nick: nick@paperight.com

AGR – Tanzania – SAGCOT

See *summary datasheet*

KIRENGA Geoffrey: Geoffrey.kirenga@sagcot.com

Southern Agricultural Growth Corridor of Tanzania (SAGCOT)

ENV – Togo – African HubCité

The smart city project HubCité Africaine refuses to impose an urban concept on users. It proposes to support population groups with modest means to occupy the city and “manufacture” the solutions for the ideal city of tomorrow.

NABILIOU Sika: info@lafricainedarchitecture.com

L’Africaine d’architecture: www.lafricainedarchitecture.com/hubciteacute.html,
wlab.weebly.com

AGR – Togo – Cashew juice processing unit

An integrated facility for cashew processing to obtain nuts and extract juice. The juice is marketed after clarification and concentration using traditional manual methods.

MISSIH Aklesso Awossa: missihawossa@yahoo.fr

Association paysanne pour la communication des ruraux (APCR, small farmers’ association for rural communication): www.erails.net/TG/apcr-togo/apcr-togo

INNSOC – Togo – Grassroots democracy and individual freedoms

Raising the awareness of, and informing the rural population regarding the importance of civil status records (birth, death and marriage certificates) and the official procedures for obtaining them.

ZINSOU Akoélé: juliette.yemey@gmail.com

Association Féminine la Lumière (AFEL, women’s association called « light »): www.afel-togo.org

ENV – Togo – Green energy for sustainable socioeconomic development

Based around women’s solar energy groups (Groupements solaires de femmes [GSF]), this project aims to promote access to energy for rural populations and autonomy for rural women, thereby alleviating poverty.

ALOUKA Séna: yvetogo@hotmail.com

Jeunes volontaires pour l’environnement, Togo (JVE, young volunteers for the environment):
www.jve-international.org

ENV – Togo – Household waste composting facility

A waste composting facility in Lomé capable of processing 20 tonnes daily and producing compost for agriculture. It employs disadvantaged members of the community in the context of a work-integration project.

KOLEDZI Komi Edem: edemledzi@yahoo.fr

Écosystème Naturel Propre (ENPRO, clean natural ecosystem): www.gevalor.org

SAN – Togo – Improved Traditional Medicine (ITM)

See summary datasheet

AMOUSSOU Gaffan Ayéwodé: amoussou.urbain@yahoo.fr

Global Biotek

ICT – Togo – OMobileFunding

A mobile-based crowdfunding project intended to improve daily life for the local population by means of participatory financing or fund collection, based on two main models: investment and donation.

KPEGBA Eméfa Améyo: globalepub@gmail.com

e-Technopole: e-technopole.com

ENV – Togo – Solar stoves for women in Togo

Solar stoves are economical, environmentally friendly and help alleviate poverty by creating attractive non-agricultural jobs in rural areas, while also reducing energy dependency.

SAMBIANI Yinmie: atodes_solaire@yahoo.fr

Association togolaise pour le développement de l'énergie solaire/Environnement et développement (ATODES/Ed, Togo association for the development of solar power/Environment and development): www.atodes.org

INNSOC – Togo – Trade union action for decent work in Africa

See summary datasheet

LAWSON BODY Boèvi Kouglo: kouglo.lawson-body@ituc-africa.org

CSI-Afrique: www.ituc-africa.org

ENV – Togo – W.AFATE 3D printer

An African 3D printer 100% manufactured from recycled electronic waste which can rapidly print out at low cost parts and small tools for use or prototyping.

GNIKOU Kodjo Afate: woelabo@gmail.com

WOELAB: wlab.weebly.com

ENV – Togo – Zam-Ké

The recycling of plastic bags, washing them, turning them inside out and sewing them together to create a base material for the production of fashion handbags and accessories.

TENU Abra Aimée: abra.tenu@stejtogo.org

Sainte Thérèse de l'Enfant Jésus (STEJ Togo): www.stejtogo.org

AGR – Tunisia – Acacias for all

A programme for reforestation by women and for women, planting trees with high economic value (gum arabic, moringa, dates, pomegranates, aloe vera) and high environmental value-added.

TOUMI Sarah: sarah.toumi@gmail.com

Ajmi Toumi: www.acaciasforall.org

SAN – Tunisia – A new extracorporeal circuit for haemodialysis

An extracorporeal circuit for haemodialysis that enables the medical practitioner to carry out nine new therapeutic procedures for patient safety and the effective handling of emergencies.

BOU AKEZ Naoufel: dr.banaoufel@harmonia-group.com

Tunis military hospital research centre:

www.defense.tn

AGR – Tunisia – Irrigation by underground diffusion

See *summary datasheet*

CHAHBANI Bellachheb: bchahbani@chahtech.com

Chahtech S.A.: www.chahtech.com

SAN – Uganda – Emergency rural transport

CA Bikes designs, manufactures, assembles and distributes wheelchairs and cycle-ambulances using local resources. In this way it improves the mobility of the poorest members of the rural population.

ATEGEKA Christopher: tresep05@gmail.com

Cabikes: cabikes.org

ENV – Uganda – Quad Stove

The Quad is an improved stove type that is easy to set up and uses pyrolysis, burning alternative fuels such as bamboo or manioc stalks. This makes it more efficient and more protective of both the environment and the health of its users.

MUHUMUZA Nolbert: muhumuza@gmail.com

Awamu Biomass Energy Ltd.

ENV – Uganda – Village Energy

The production and distribution in rural areas of solar power installations using 3D printers and recycling plastic items.

MUSUUZA Abubaker: aabu@villageenergyOuganda.com

Village Energy Limited: www.villageenergyuganda.com



AFRICAN FORUM

100 INNOVATIONS

FOR SUSTAINABLE DEVELOPMENT

Paris, 5 December 2013



**21 innovations presented in
Paris on 5 December 2013**



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Paris, 5 December 2013



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BOTSWANA

HEALTHCARE-DISABILITY

Innovation: Solar Ear

Innovation representative: Modesta Nyirenda

Low-cost hearing aids for developing countries

The World Health Organization (WHO) estimates that 360 million people worldwide have disabling hearing loss. The majority of these people live in low- and middle-income countries, where fewer than 3% of hearing-impaired people are fitted with a prosthetic hearing aid. This is due to a lack of specialists and, above all, to the prohibitive cost of such devices: €1500 on average. On top of this, the cost of maintenance, especially battery replacement, comes to around €150 per year.

In 2003, the company Godisa Technologies Trust created Solar Ear, the first generic hearing aid. It is suitable for 80% of cases and ten times cheaper than the traditional model. Moreover, operating costs are minimal, as the Solar Ear kit includes a solar charger allowing the batteries to be recharged either by the sun, indoor lighting or mains electricity.

Solar Ear is a social enterprise, which is directed primarily by hearing-impaired people and also employs many such people in its production centres in Botswana, South Africa and Brazil. It reinvests its profits in education and healthcare programmes, professional training for young deaf people, especially women, etc. Lastly, the firm promotes South-South transfers of technology: from Botswana to Brazil, Mexico, India, and so on.

More information: solarearinternational.wordpress.com



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@Gafreh

BURKINA FASO

SOCIAL ECONOMY-ENVIRONMENT

Innovation: Plastic bag recycling centre

Innovator: Haoua Ouedraogo-Ilboudo

Plastic bag creations

In 2003, Gafreh, the women's action group for economic recovery in the region of Houet, opened a recycling centre to transform plastic bags into products such as sandals, mobile phone cases, wallets and table mats.

The process involved is simple. Used plastic bags are collected in the regional capital, Bobo-Dioulasso, and the surrounding area. Once they have been cleaned, they are cut into thin strips, which are gathered, spun and woven on looms. They can also be crocheted or knitted.

The Gafreh recycling centre currently employs 85 women to create objects using recycled plastic bags. Since being established in 2003, it has offered its members and their families a stable income, reduced environmental pollution and promoted women's education via training provided at the centre. It is a member of the World Fair Trade Organisation (WFTO).

More information: www.gafreh.org



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@lau rey

CAMEROON

MICROFINANCE-RENEWABLE ENERGY

Innovation: Microfinance and Energy Programme

Innovation representative: René Pierrot Ekoe

Microfinance for solar power

In Cameroon, around 50% of the population has no access to electricity. This is due to the country's energy deficit and the costs, which are prohibitive for the poorest people. In response, and following the successful launch of their "water and microfinance" programme, the Participatory Microfinance Group for Africa (PAMIGA) has adapted this approach to create "energy loans". In partnership with Schneider Electric, which provides technical assistance, the programme offers microloans linked to solar technology for households and small business development, with the aim of supporting 70,000 people from underprivileged social groups in rural and urban areas.

Through the intermediary of partner microfinance institutions, PAMIGA offers two types of credit. The first, known as "light credit", is designed for households. It enables them to purchase a low-consumption solar lighting kit. The second, known as "energy credit", is designed for small business owners and aims to provide them with the electricity necessary to develop their activity (hair salon, bar-restaurant, etc.), through solar technology.

This initiative, which helps to reduce CO₂ emissions by limiting the use of toxic and polluting traditional energy sources such as kerosene, is currently being replicated in Tanzania and Ethiopia.



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ETHIOPIE

ENERGY-ENVIRONMENT

Innovation: biogas backpack

Innovation representative: Araya Asfaw

Biogas in a backpack

In Ethiopia, poor communities have little access to energy. Butane, oil and charcoal are the main sources, but they are expensive and their production has a significant environmental impact: if it continues at the current rate, the country will soon have no forests left.

According to the Food and Agriculture Organization of the United Nations (FAO), “stored biomass on the earth’s surface at present is approximately equivalent to the entire proven fossil fuel reserves (oil, coal and natural gas)”. So there is easily enough to satisfy household needs for lighting, cooking, heating, and so on. But the problem with fuels, including biomass, is their distribution.

In Ethiopia, the Executive Director of the Horn of Africa Regional Environment Centre and Network (HoA-REC&N), Araya Asfaw, wishes to facilitate the use of bioenergy to improve the energy situation of the poorest communities. His solution? The biogas backpack. Biogas is a clean energy source, which does not pollute indoor air, unlike oil, and is all the more easy to produce as Ethiopia has one of the largest cattle populations in Africa (livestock owners and farmers could sell their organic waste and substrate to plant owners and receive biogas at a reduced price in exchange).

The biogas backpack, designed in partnership with the University of Hohenheim in Germany, has straps for transport (4.4 kg when full) and a valve allowing it to be connected to a plant and filled up.

Although several other research projects on biogas opportunities are currently underway at HoA-REC&N, Dr Asfaw is already preparing to manufacture these backpacks in Ethiopia. The first orders have been received; all that is needed to launch production are some investors.



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@PlaNefinance

GHANA

INFORMATION AND COMMUNICATION TECHNOLOGIES-SOCIAL ECONOMY

Innovation: rural sourcing management system

Innovation representative: Maxwell Kuunyem

Barcodes for fair prices

In north Ghana, the poorest region of the country, 600,000 women depend on the collection and processing of shea nuts. To improve their economic and social situation, the organisation PlaNef Finance and the software designer SAP, with the support of European donors, have helped these women to form a structured organisation, called Star Shea Network (SSN). Its goal is to improve the efficiency of the supply chain and strengthen the women's negotiation capacities, allowing them to obtain a better price for their products on the international market.

The latest innovation by PlaNef Finance and SAP, however, is the development of a traceability tool for SSN products. Each member of the network has been given a unique barcode to put on her sacks of produce. When the bags are received by the SSN coordinators, the barcodes are scanned using a smartphone and the production data is synchronised centrally by the organisation.

With this innovation, the network's 10,000 members are guaranteed a fair income and the security of a pre-payment, freeing them from the seasonal speculation on shea nuts that forced them to sell their goods at a reduced price.

Over the past two years, their income from shea nuts has doubled, while their income from shea butter has increased fivefold.

SSN aims to expand the organisation to 20,000 producers over the next five years.

More information: www.starshea.com



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@Didier Chabrol, CIRAD

GUINEA

AGRICULTURE

Innovation: creation of a protected geographical indication (PGI)

Innovation representative: Kerfalla Camara

A protected geographical indication for Ziama-Macenta coffee

In the far reaches of Guinea's forest region, neighboured by Liberia and Côte d'Ivoire, small-scale farmers grow coffee with exceptional qualities called Ziama-Macenta.

To achieve recognition for the value of their product, for which they had long been poorly paid, around one thousand farmers have taken action over the past five years, with the support of groups of collectors and the cooperative Woko, to structure the industry, develop specifications and obtain a protected geographical indication (PGI). Their initiative was supported by the PAMPIG project for the creation of geographical indications run by the African Intellectual Property Organisation (AIPO), with technical assistance from the French Agricultural Research Centre for International Development (CIRAD).

This label of quality, previously reserved for European products, contributes to the recognition of African expertise and local produce. But above all, it represents a powerful economic driver: a guarantee of the coffee's quality means that it can be sold at a higher price and protected from market fluctuation. It boosts distribution and exports, and the production area can be developed and preserved. Lastly, obtaining a PGI involves technical assistance, as well as training activities and capacity-building for industry stakeholders.

More information: www.mge-guinee.org



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© Koru-Kenya

KENYA

SOCIAL ECONOMY

Innovation: a means of payment that is complementary to the official currency

Innovation representative: Caroline Dama

A solidarity economy in shantytowns

In a country where 70% of the population live in shantytowns, the strengthening of informal economies represents, in terms of human impact, a real strategy for development.

In the shantytown of Bangladesh (20,000 inhabitants) on the outskirts of Mombasa, the Bangla-Pesa programme aims to organise the local network of salespeople and small business owners, who are primarily women, and enable its members to trade goods and produce in order to fulfil their basic needs.

This initiative, developed by the non-governmental organisation Koru-Kenya, is based on a mutual-credit-clearing system which provides a means of payment that is complementary to the official currency, in the form of secure printed vouchers that can be exchanged between members of the network. These vouchers help to make up for the frequent shortage of cash in the shantytown.

The water-seller can use them to buy vegetables from a farmer, who uses them to pay for her goods to be transported to the market by an errand boy, who uses them to pay for his shoes to be repaired by a shoemaker, who, lastly, uses them to buy water from the first saleswoman, thus completing the cycle of trade.

In Bangladesh, the programme has led to an increase in transactions and stabilised the local economy. Far from replacing the national currency, the vouchers have helped to turn it into a savings and investment tool, allowing members of the network to enhance their business or simply improve their living conditions.

More information: koru.or.ke/fr/node/53



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@LMC

LIBERIA

INFORMATION AND COMMUNICATION TECHNOLOGIES

Innovation: 2-Way Automated Budget SMS

Innovator: Francis Brewer

Budget transparency via mobile

In 2011, when Liberia's triple vote took place (presidential, legislative and senatorial), Liberians were, for the first time, able to access the results in real time. Better still, they could do so before the results had even been published by the National Elections Commission.

They owe this achievement to the Liberia Media Center (LMC), a non-governmental organisation offering resources, training and support to media professionals.

Continuing their pursuit of economic and political transparency, LMC recently developed a mobile telephone application offering access to the national and regional budgets for healthcare, education and infrastructure.

The user sends a series of codes by SMS to a server, which sends back the requested information. For example, the code NA.BUD.HEA (national budget health) can be sent to 2220 to obtain detailed information on the national healthcare budget.

This innovation, which is funded by the Open Society Initiative for West Africa (OSIWA) and implemented in partnership with the Liberian Ministry of Finance, promotes the dissemination of previously unexploited public data, as well as budget transparency, tax traceability and citizen involvement in public life.

More information: lmc.org.lr



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Graines de ricin. @museumdetoulouse

MADAGASCAR

SOCIAL ECONOMY

Innovation: *business solutions to poverty*

Innovation representative: *Njaka Andrisson Ravelomanantsoa*

The European vegetable oil market boosts the Malagasy rural economy

Androy is an arid, isolated region in southern Madagascar which suffers frequently from food shortages (95% of the population live below the national poverty threshold). Yet it was in this region that three associates, a French chemist and two Malagasy agronomists, chose to set up their business, PhileoL, specialising in the production of crude vegetable oil for export on the European market.

The three men aim to contribute to inclusive economic development in the region, by purchasing supplies first and foremost from local small-scale farmers of oil-producing seeds (mainly castor beans), to whom they offer a secure, fair price.

Since its creation in 2008, PhileoL has built up links with financial partners (investment funds, donors, etc.) in order to expand its activity and support the structuring of the industry. With the backing of NGOs such as GRET (Groupe de recherches et d'échanges technologiques), it has enabled small-scale producers to obtain quality seeds and equipment to improve their yield.

PhileoL is a true social enterprise, reinvesting its profits in Androy and creating local employment (37 permanent staff and 135 temporary staff). Its activity currently benefits more than 7000 rural families and offers a sustainable economic answer to food insecurity and poverty in the region.

More information: www.philoel.com



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MALI

INFORMATION AND COMMUNICATION TECHNOLOGIES

Innovation: Radio Marché, Foroba Blon and Tabalé

Innovation representative: Amadou Tangara

Voice-based technology for trade and information

With the development of ICTs, it is now possible to provide essential services via mobile telephone to underprivileged and, most importantly, illiterate communities without access to SMS or Internet.

As part of a project funded by the European Union (Voice-based Community-Centric Mobile Services [Voices]), the NGO Sahel Eco, in partnership with SBC4D (a company specialising in mobile and voice technology for social development) and Orange Labs (the Orange group division responsible for research for emerging countries), have developed voice-based technology that can be used to provide digital services regardless of the user's language and level of literacy. Three projects currently use voice as their only interface:

Radio Marché is a service that connects small-scale farmers (600 members, 70% of whom are women, in 19 villages) with buyers in Mali and Burkina Faso: it converts sales offers sent by telephone into multilingual advertisements that are broadcast by local community radio stations.

Foroba Blon is a citizen journalism tool that enables users to share content via Internet or radio by communicating their news story by telephone.

Tabalé is a voice-recognition system that allows messages to be sent in vernacular languages (bambara, bomu, etc.) to mobile-phone users to inform them of events (group sales of farm produce, meetings, etc.)

By circumventing the obstacles that illiteracy poses to the use of ICTs, this innovation boosts trade and fosters the social inclusion of Malians from the Tominian region, particularly women and young people.



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MAURITANIE

ENVIRONMENT AND RENEWABLE ENERGY

Innovation: *Typha charcoal*

Innovator: *Bebana Ould Mouhamed Lemine*

Invasive plant, domestic fuel

In 1986, the building of the Diama anti-salt dam on the river Senegal led to the invasion of the banks by *Typha australis*, a plant from the reed family. Across the border in Mauritania, this invasion of the river had devastating consequences on human activities and the ecosystem, particularly in the Diawling National Park. Fishing areas have been reduced, water-borne diseases have developed, agricultural areas have been invaded, and irrigation channels have become blocked. In parallel, deforestation due to illegal charcoal production has magnified this damage to biodiversity.

To halt the spread of *Typha australis*, Bebana Ould Mouhamed Lemine has developed a process to produce cooking charcoal from the plant. Three pilot villages have been equipped with production units. One of them, Garack, has managed to produce 1500kg of charcoal in seven months, clearing an area of 2,500 m² for fishing. In addition to its environmental interest, this innovation also has an effect on creation of income, with more than 100 women involved in production and a dozen men paid to harvest *Typha australis*. It has also improved social cohesion and the environment for fishermen, farmers and the inhabitants of cleared areas.

This project to promote *Typha charcoal* as an alternative to wood charcoal, which also helps combat deforestation, is implemented in partnership with GRET and the Diawling National Park thanks to funding from the European Union and the Agency for Universal Access to Services (APAUS). The neighbouring countries Senegal and Mali, also affected by *Typha australis*, could benefit from replicating the programme.

More information: www.iset.mr



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@ONP

MOROCCO

HEALTH AND FOOD SECURITY

Innovation: isothermic containers for street vendors of fish
Innovator: Lahoussine El Boudrari

« Fresh fish! »

In Morocco, the fish sales conditions of street vendors often fail to comply with the hygiene and packaging standards recommended by the Ministry of Health. There is a notable risk of severe consumer food poisoning.

With the support of its supervising ministry and local authorities, the National Fisheries Office (ONP) proposes to equip street vendors with freight tricycles equipped with isothermic containers, aimed at ensuring the quality of sold goods and complying with the cold chain. To facilitate the adoption of this vehicle, the ONP is ensuring favourable financing terms and training vendors in packaging and hygiene.

In addition to its health and regulatory goals, this project aims to eliminate the precarity of street vendors by modernizing their activity and moving it into the formal economy.

This initiative should reach close to 1,000 street vendors from across Morocco and contribute to increasing their income while fostering their organization within professional associations.

More information: www.onp.co.ma



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NIGER

CONSTRUCTION-ECOLOGY

Innovation: construction process for light buildings and retaining walls of permanent hydraulic structures (channels, drains), using “forked” bricks, without bedding mortar, coffering or clamps

Innovator: Moussa Abou

Rationalising the materials and environmental footprint of the construction industry

Moussa Abou, who has received several prizes at innovation exhibitions in Africa and recently at the International Exhibition of Inventions in Geneva (2013), has designed a construction process aiming to rationalise the use of materials, and consequently, the cost and environmental footprint of buildings.

The “Abou method” can be used to construct the following, without coffering or clamps:

- buildings made of rubble (natural stone) and/or composite walls built from concrete, concrete reinforcement and fresh mortar made of laterite and/or banco (raw earth);
- permanent channels and/or drains.

The process is based on the use of local construction materials. The method is simple and requires few tools, allowing the duration and costs of large-scale building work to be reduced by 50% in comparison to traditional practices.

The “Abou method” also uses techniques and materials that help to reduce the environmental footprint of construction as follows:

- by improving energy efficiency (the laterite shrinks as it dries, creating two air spaces inside the brick, which provide natural air conditioning for the building);
- by decreasing greenhouse gas emissions from transport, construction and/or importing materials (no bedding mortar, cement use cut by 50%, etc.);
- by limiting deforestation (use of coffering wood is reduced by 95%).

This is the solution to many problems, according to Moussa Abou: “If the construction industry thrives, so does the economy!”



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NIGER

SOCIAL ECONOMY AND GENDER EQUALITY

Innovation: technical and entrepreneurial capacity building for women

Innovation representative: Bibata Gndou Barry

Promoting women's empowerment through crafts

Organized since 2000 in partnership with the Ministries for Crafts and the Promotion of Women, the Niamey Women's Crafts Fair (SAFEM) is one of the largest gender events. It is also the name of the government agency that holds the event, which is responsible for promoting women's crafts and economic empowerment.

To play this role, SAFEM has developed a crafts mentorship programme aimed at building the technical, entrepreneurial and commercial capacities of women, as well as «Gender» workshops to identify and combat the prejudices which are an obstruction to their economic and social empowerment (interviews, discussions, advocacy, etc.). The fundamental goal of SAFEM is to improve the income of craftswomen to promote a redefinition of their place in the home and in the community, and more generally the place of women in Niger's society.

This project is supported by La Guilde and several other French NGOs. It has already supported more than 200 craftswomen in 8 regions of Niger. In its action areas, it fosters the development of craftswomen's activities and therefore an improvement in their income, as well as shifts in perception of gender in the families of project beneficiaries.

More information: www.safem-niger.org



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@ARED

RWANDA

ENERGY

Innovation: Mobile Kiosk Platform (MKP)

Innovator: Henry Nakarundi

Recharge mobile telephones using solar power

With sales of more than 600 million units, Africa is the second largest market for mobile phones in the world, ahead of the United States and Europe.

However, in most countries on the continent, access to electricity is chaotic: in Rwanda, fewer than 20% of the population are connected to the power grid, and most of those people live in Kigali. In these conditions, charging a mobile phone is a real challenge.

In response to the situation, Henry Nakarundi founded African Renewable Energy Distributor (ARED) and developed a mobile charging kiosk for mobile phones. The system is simple: by day, two solar panels (40 W) charge the central battery; by night, in cloudy weather or when travelling, the battery is charged manually using a hand crank. This mobile kiosk can be used to recharge up to 16 telephones simultaneously for a small price (10 cents) and counters Africa's energy deficit by fulfilling the needs of mobile phone users in urban and rural areas.

For \$330, Henry Nakarundi offers a franchise opportunity including the mobile station, training and technical support. Franchisees can make between \$100 and \$150 per month and this amount will soon rise when new services are added, such as sale of accessories, talk time, handsets, etc.

More information: www.a-r-e-d.com



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INFORMATION AND COMMUNICATION TECHNOLOGY

@Mlouma

Innovation: Mlouma

Innovator: Aboubacar Sidy Sonko

An online agricultural exchange

In Senegal, where agriculture accounts for more than half of jobs, small producers struggle to sell their goods. Consumers meanwhile pay high prices because of the profit margins made by middlemen in the supply chain.

Aboubacar Sidy Sonko, a specialist in network systems, has shaken up this circuit. In 2012, he created the Mlouma platform, which connects vendors and purchasers of agricultural products. Based on the principle of an online exchange accessible via SMS, the Internet and a call centre, Mlouma offers producers the possibility to communicate with customers on their products, specifying the price, quantity, and place of production, as well as updating their stock in real time. Purchasers can consult offers and make orders through the same channels. When they reach an agreement, a transporter is contacted for delivery.

More than 3,000 producers are currently in relation with wholesalers thanks to Mlouma. The result is that they have improved their margins and contributed to regulating consumer prices.

Mlouma was recognized as one of the continent's 40 most innovative start-ups in 2012 and its founder now hopes to develop it in other sectors (for the moment it only offers onions, papayas and watermelons), as well as to cover the rest of Senegal and even neighbouring countries.

More information: www.mlouma.com



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SOUTH AFRICA

EDUCATION-CULTURE

Innovation: *Obami, digital learning platform*

Innovatrice: *Barbara Mallinson*

From chalk to keyboard

Barbara Mallinson's aim is to «bring teaching methods into the 21st century». In 2008, this young woman from Johannesburg developed Obami, a digital communication and learning platform designed for schools, which can be used to create educational resources and share them with pupils, teachers and parents.

By applying the recipe of social networks such as Facebook to a virtual teaching environment, Obami offers new ways to learn. This interface provides teachers with a space for creation, collaboration, and sharing of interactive multimedia tools and content (such as blogs, videos, e-learning, educational games). Pupils, meanwhile, can access this content, use monitoring tools (homework diary, interactive calendar, etc.), benefit from teachers' support and complete assessments online. They can also communicate with other pupils, helping and encouraging one another.

South Africa, like its neighbours, suffers from stark socioeconomic and education inequalities (in terms of infrastructure, amenities, gender balance, etc.). Through the support that Obami provides to stakeholders and beneficiaries in the field of education, some of these inequalities can be reduced.

More than 340 establishments and 30,000 users in Africa, the United Kingdom and the United States are currently registered on this network.

More information: www.obami.com



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100 INNOVATIONS FOR SUSTAINABLE DEVELOPMENT

Paris, 5 December 2013



TANZANIA

AGRICULTURE AND AGROECOLOGY

Innovation: Southern Agricultural Growth Corridor of Tanzania (SAGCOT)

Innovation representative: Geoffrey Kirenga

@SAGCOT

A public-private partnership for agriculture and food security

In Tanzania, the agriculture sector is comprised mainly of poor, small-scale subsistence farmers. Yet the country possesses large expanses of arable land, which are currently underexploited.

In 2010, a pilot Southern Agricultural Growth Corridor of Tanzania (SAGCOT) project was launched by the authorities. It is based on a partnership between the government, private companies and donors, seeking to develop the agricultural potential of the southern region and to improve food security for the country. Extending over almost one third of Tanzania, from the Indian Ocean to the borders of Zambia, the corridor aims to increase the land area used for commercial farming tenfold by 2030.

One of SAGCOT's main goals is to give small-scale producers access to profitable agriculture, increasing their production capacities, sales opportunities and commercial revenue by bringing together stakeholders from the food production chain (farming businesses, service providers, processing plants, etc.) within the corridor.

Coordinating public-private investments should enable the improvement of infrastructure and facilities (roads, irrigation, electricity, storage, etc.) and help to mitigate the risks inherent to the development of farming businesses.

The project's aims are ambitious: convert 350,000 hectares to profitable production, transform 10,000 small-scale producers into commercial farmers, create 420,000 new jobs, lift 2 million people out of poverty and generate \$1.2 billion in annual farming revenue.

To achieve these goals, SAGCOT must attract investment of \$3 billion over 20 years. If it does so, the area might just become the African Silicon Valley of food production, as the project's initiators hope.



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TOGO

HEALTH

Innovation: production of improved traditional medicines (ITMs)

Innovator: Gaffan Ayéwodé Amoussou

Developing the traditional African pharmacopeia

In Togo, like in most African country, a large fringe of the population prefers to turn to traditional and herbal medicines in case of sickness for both sociocultural and financial reasons.

Seeking to develop the traditional African pharmacopeia, Gaffan Ayéwodé Amoussou, a togolese biological engineer, has set up Global Biotek, a company specialized in research into the bioactive molecules of plants and marketing improved traditional medicines (ITMs). ITMs are products derived from plants or plant extracts. They are laboratory-tested and carefully dosed (to resolve innocuousness and efficacy issues) and have the advantage of being financially affordable for the populations of low- or middle- income countries.

In partnership with the National Institute of Medicinal and Aromatic Plants of Morocco (INPMA), the Laboratory of Microbial Biotechnology at the Fez Faculty of Science and Technology and the University of Lomé, Gaffan Amoussou is developing his research with the hope of contributing to the recognition of ancestral medical knowledge, as well as to the use and conservation of thousands of threatened plants.



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@ITUC

TOGO

LABOUR RIGHTS

Innovation: supporting union action in economic matters to make decent work a reality in Africa
Innovation representative: Boèvi-Kouglo Lawson-Body

Trade unions, promoting decent work in Africa

In 2012, in liaison with the French CFTD and CGT unions, the African Regional Organisation of the International Trade Union Confederation (ITUC-Africa) initiated a capacity building and networking project for West African organizations. It involves 25 trade unions in seven countries: Benin, Burkina Faso, Guinea, Mali, Niger, Senegal and Togo.

Faced with the disorganized proliferation of structures and the erosion of the union movement in Africa, this project aims to give these organizations the means to become truly involved in the formulation and implementation of economic and social policies in their countries, and more generally in West Africa and with Pan-African bodies.

To this end, trade union analysis and research committees (CARES) have been established in each country. The CARES are the keystones of the project, made up of two representatives (man/woman) of each trade union organization involved, contributing to the creation of national inter-union relations. Their tasks include producing reports, analysis and trade union thematic publications, etc. on the economic and social issues of workers, as well as carrying out mobilization and advocacy actions through campaigns and events. They hold national training seminars and carry out networking efforts (sharing of experience, comparison of analysis, etc.) at national and regional level between trade union organizations and other civil society stakeholders.

More information: www.ituc-africa.org



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© Bellachheb Chahbani

TUNISIA

AGRICULTURE AND AGROECOLOGY

Innovation: *The Buried Diffuser*

Innovator: *Bellachheb Chahbani*

Efficient and economical irrigation

Water is one of the major challenges of the 21st century. According to the United Nations, around half of the global population live in areas that will be exposed to drought by 2030. Intensive farming has a part to play in this: irrigation – particularly surface irrigation, the most common form – represents the main use of fresh water and causes significant wastage (evaporation, drainage, etc.).

In response, Bellachheb Chahbani has developed a process to ensure optimal management of irrigation water. In place of traditional sprinkler or drip methods, his company, Chahtech SA, markets a system of buried diffusers. Thanks to their microporous base, these reservoirs bring water directly to the roots of the plant. Several models are available to suit different uses (trees, vegetables or container plants) and they all significantly reduce the need for water.

Buried diffusers also offer the possibility of anticipated irrigation, whereby water is stored in the soil around the tree's root system during autumn and winter to cover its needs in spring and summer. Working on the same principle, Bellachheb Chahban has developed a method of underground water "injection", which can provide enough water in two weeks to cover plants' needs for two years.

This buried irrigation system not only increases productivity, but also preserves a vital resource.



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BACKGROUND ON FRENCH OFFICIAL DEVELOPMENT

ASSISTANCE

Key figures

€3.1 billion: budget for French Official Development Assistance (ODA) under the Finance Bill for 2013.

€9.3 billion: total expenditure contributing to Official Development Assistance in 2011, all ministries included. This figure takes into account the French aid budget, as well as, for example, expenditure linked to cancellation of State debt, hosting of foreign students, the humanitarian sector, etc.

France's contributions account for **10%** of global Official Development Assistance.

65% of French Official Development Assistance reaches France's partner countries in the form of bilateral aid, implemented by the Agence française de développement (AFD), the operator France Expertise International (FEI) and the embassies.

20% of French Official Development Assistance is allocated to the European Union. France is the second largest contributor to the European Development Fund, the EU's main instrument for development aid, which has a budget of €27 billion, spread over seven years.

15% of French Official Development Assistance goes to multilateral organisations (such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, UNITAID, the Global Environment Facility, the African Development Bank, etc.) or international programmes (such as UNICEF, the World Food Programme, etc.).

France is the **fourth largest contributor to global aid.**

A few examples

French assistance has enabled **10 million children to receive primary education** and **3 million children to receive early secondary education** (AFD, 2012).

French bilateral assistance has improved access to **water for 1.79 million people** in the world (AFD, 2012).

Over the next three years, **France will donate €1.08 billion to the fight against AIDS, tuberculosis and malaria** (via the Global Fund).

The French financial transaction tax will provide healthcare for 2 million children in the Sahel.

Development also means...

...over **5,000 French local governments** running more than **13,000 international solidarity projects**; over 1 million volunteers mobilised in France for international solidarity and sustainable development, and between 1.5 million and 2 million donors; over 300 national NGOs and 3,000 regional NGOs.