



2012

2015

FIGHTING POVERTY IN WAYS THAT WORK

ANNUAL REPORT 2012
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The MDG Centre
East and Southern Africa
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The Millennium Development Goals (MDGs) were developed out of the eight chapters of the United Nations Millennium Declaration, signed in September 2000.

The eight goals and 21 targets are:



Eradicate extreme poverty and hunger

Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.
Achieve full and productive employment and decent work for all, including women and young people.
Halve, between 1990 and 2015, the proportion of people who suffer from hunger.



Achieve universal primary education

Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.



Promote gender equality and empower women

Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015.



Reduce child mortality

Reduce by two thirds, between 1990 and 2015, the under-five mortality rate.



Improve maternal health

Reduce by three-quarters the maternal mortality ratio.
Achieve universal access to reproductive health.



Combat HIV/AIDS, malaria and other diseases

Have halted by 2015, and begun to reverse, the spread of HIV/AIDS.
Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it.
Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.



Ensure environmental sustainability

Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources.
Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss.
Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation.
Have achieved, by 2010, a significant improvement in the lives of at least 100 million slum dwellers.



Develop a global partnership for development

Develop further an open, rule-based, predictable, non-discriminatory trading and financial system.
Address the special needs of least developed countries.
Address the special needs of landlocked and small island developing States.
Deal comprehensively with the debt problems of developing countries.
In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries. In cooperation with the private sector, make available benefits of new technologies, especially information and communications.



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FOREWORD

By Dr Belay Begashaw, Director

Building on progress: Scaling up the Millennium Villages Project

The launch of the second phase of the Millennium Villages Project (MVP) in October 2011 marked the beginning of an acceleration towards our finishing line – the attainment of all the Millennium Development Goals in all the villages by 2015, and a seamless handover of the Millennium Village model to communities and African governments. The event was also a time to look back on gains made by the Project so far and we are thrilled to report that all communities with which we are working are on track to achieve the Goals. As we at the MVP embark on our final phase, we do so with a clear vision of the future shaped by the solid achievements and lessons learnt over the last five years.

As 2011 draws to a close, over half a million people in villages across eleven countries in Sub-Saharan Africa are benefiting from Millennium Village interventions in agriculture, health, education, infrastructure and business development, with a focus on gender and environment running throughout. In total, 21 communities are now benefiting from MDG Centre initiatives. Their progress toward the MDGs demonstrates that integrated rural development, accompanied by the latest scientific, technological and business innovations, is a realistic means by which to empower the most impoverished communities to lift themselves out of poverty. The results speak for themselves: average maize yields have doubled, and in some villages quadrupled; 68% of people now have access to safe drinking water,

compared to only 17% in 2006, and we have brought water to within 500 meters of almost all households; children at Millennium Village schools are making us proud with improved grades, thanks to new class rooms, books and other materials and the school meals program which 75% of students now enjoy. At least half of previously isolated communities are now within two kilometers of an all-weather road, facilitating access to markets, health services and inflows of goods, new technology, and knowledge.

Millennium Village interventions can be adapted to improve lives in even the most challenging contexts, and our work in Dertu in Northern Kenya as part of the Drylands Initiative is a case in point. The human tragedy of the drought sweeping through the Horn of Africa once again shocked the world this year and the death toll in the region's poorest and most neglected communities continues to rise. The MDG Centre's long term solution to boosting people's resilience to weather such shocks and diminish their reliance on emergency relief is now serving as a model for the rest of Africa.

In Dertu, we have empowered pastoralist communities through targeted investments in livestock management, business development, mobile health clinics and schools, and essential infrastructure such as water points and off-grid electricity.

Drought-affected countries adopted this approach at the Summit on the Horn of Africa Crisis in September this year, initiated by the Government of Kenya in collaboration with the MDG Centre. Lessons learnt from the Millennium Villages informed the Nairobi declaration and drought action plan adopted by Ethiopia, Somalia, Kenya, Uganda, Djibouti, and South Sudan. Best practices and cutting-edge technologies of the MVP will now support the regional effort to escape the scourges of extreme poverty and famine.

Other African countries are also coming on board, and working with governments is a corner stone of the MDG Centre's activity. It facilitates the spread of benefits from the villages to allow MDG attainment at national level, and transfers ownership of existing Millennium Village interventions to local authorities in preparation for the 2015 deadline. The governments of both Kenya and Rwanda, to name but two, have been quick to launch scale-up policies with the aim of mainstreaming best practices from the villages nation-wide.

Our work with the African Union Commission (AUC) mainstreams MDG-focused policies throughout the continent. In implementation of the MOU signed by the African Union (AU) and the Earth Institute in 2010, a delegation of AU officials visited Sauri Millennium Village in October 2011. In addition to ongoing technical support, the MDG Centre is now working with the organization on the 2012 MDG report, which will demonstrate how lessons learnt from the Millennium Villages can be applied to achieve the MDGs in different African contexts, via policy change at the country level.

Private sector partnerships are also a corner stone of our success, particularly when applying innovative technology to reduce poverty, and moving from physical infrastructure to the virtual connectivity of ICT. For example, Airtel and Ericsson link once isolated communities to global communications networks, and access to mobile phone connectivity is now within two kilometers of 80% of households.

With mobile connectivity and access to either grid or solar power, community health workers are able to feed patient data directly into a central database via SMS text messages using the innovative ChildCount+ application.

Farmers are able to check the day's market prices on their mobile phone. Communities are able to pay for clean energy via SMS as part of our innovative SharedSolar initiative.

Following the documented success of the MVP, there has been substantial interest in its replication across Africa. We are thrilled to have launched four new Millennium Villages in Zambia and Mozambique in partnership with the mining company Vale this year, and a fifth on Pemba island off the coast of Zanzibar, supported by KMPG.

Going forward, a key objective is to set communities on a path to sustainability way beyond the life of the Project, by empowering them with independent income-generating activities. Up to \$20 million dollars in business loans pledged by long-term MVP supporter George Soros will be used to strengthen farmer groups and businesses in the Millennium Villages into formal cooperatives to enable them to work together, improve their bargaining position, achieve economies of scale, and enable access to finance and other resources. Tailor-made training for cooperative managers is being provided.

Income is already being invested back into priority areas of health, education, infrastructure and agriculture. Sauri's school feeding program for example, is wholly-self sufficient following initial MVP investment, run by parents, students and teachers who generate sufficient income to buy inputs like livestock and fertilizer, invest in books and uniforms for the most needy pupils, and provide daily nutritious meals for a growing number of students.

As the Millennium Villages Project follows a learning-by-doing approach, so too the structure of the organization is changing to achieve new goals. In July this year, the MDG Centre was honored to become the newest member of Columbia University's Global Centers, a network of seven institutions around the world and the first in Africa. The MDG Centre will now expand its role, staff and facilities to accommodate global academic and student exchange as well as interdisciplinary research, benefiting Kenya and Africa as a whole. After many years of invaluable support from the World Agroforestry Centre (ICRAF), the MDG Centre will move to its new headquarters in Nairobi in February 2012.

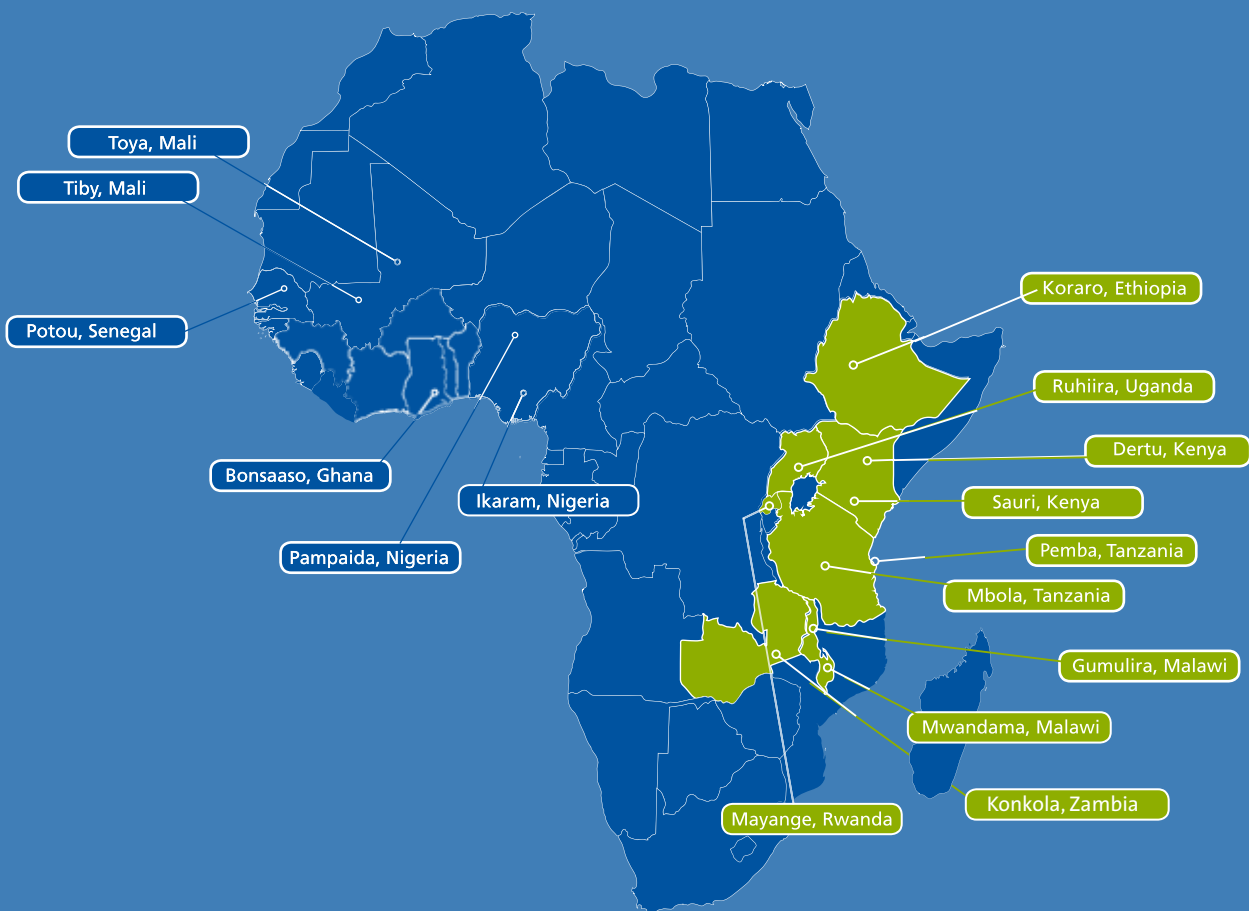
The founding partners of the MVP, the Earth Institute and Millennium Promise, are also strengthening their partnership in order to better support the leadership in Nairobi and the villages themselves. Millennium Promise has therefore shifted its mandate to provide operational support to the MVP. Earlier this year, our external operations partner UNDP has relinquished this role in favor of UNOPS, after many years of invaluable collaboration. The UNDP will continue to work with us on scale up and government policy formation.

The next four years will be an exciting and challenging time for the MDG Centre, as we bring together the latest scientific approaches with the support of government and private sector partners to show that even the poorest communities can achieve the Millennium Development Goals via integrated, community-owned development initiatives.

2015

ACCELERATING THE PACE OF PROGRESS

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The Millennium Villages Project has shown the concept of multi-sector, integrated development to be realistic, and the following pages highlight the progress made across all sectors in improving the lives of Millennium Village communities in 2011. No single intervention can effect lasting change, and as a result, the MVP's approach combines development sectors in an effort to achieve all the Millennium Development Goals in all the villages by 2015. At the beginning, impressive gains in food security and hunger reduction, health, increased access to safe drinking water,

and primary education were achieved through the provision of basic infrastructure and services. By 2011, these building blocks have been put in place, and we start to accelerate the pace of progress through sustainability, innovation and scale up measures across all sectors. By integrating Millennium Villages into national programs, harnessing new technologies and the latest scientific innovations and ensuring villagers generate sufficient income to invest back into areas such as health and education, the MVP is gearing up to effect sustainable, long-term change.



HEALTH

Helping communities be healthier

The fourth, fifth and sixth MDGs aim to reduce child mortality, improve maternal health and combat HIV/AIDS, malaria and other diseases. Many countries in Sub-Saharan Africa are lagging behind in achieving these Goals, and thus the MVP is determined to demonstrate that using an integrated approach, health improvements are possible in even in the most challenging environments. We can already take pride in having increased the percentage of births in clinics and those attended by skilled birth attendants to 56% from 38% three years ago, and having improved immunization cover to 80% from as low as 50%. We have made huge strides in the near-eradication of diseases such as malaria, in making zero mother to child transmission of HIV a reality and in the readiness of national governments to make Community Health Workers (CHWs) a cornerstone of national policies.

Yet, as we enter the final phase of the Project, much remains to be done. To ensure the efficiency and sustainability of our programs in view of the 2015 deadline, we are maximizing the use of ICT, targeting youth, increasing male involvement in family health and strengthening partnerships with governments, international agencies and the private sector.

BETTER HEALTH FOR MOTHERS AND CHILDREN ... WITH MALE INVOLVEMENT

Following on from our earlier successes, in 2011 we focused on streamlining health service delivery for women and children. A new strategy was to promote discussions of maternal health within women's groups engaged in income-generating activities, to link economic empowerment to improved health. Increasing women's spending power normally translates into gains in health, nutrition and education for the whole household.

A strategy of getting all family members on board has improved our mother and child health programs. Everyone is healthier when the men in the family are also involved, and when they have been sensitized to issues such as family planning, traditionally the preserve of women.

A HEALTHY FUTURE LIES WITH YOUNG PEOPLE

As part of our Project-wide drive to ensure the continuation of our programs beyond 2015, we stepped up our adolescent health activities, as we have seen how much harder it is to change the attitudes of the older generation. We are finalizing an agreement with the World Health Organization (WHO) to consolidate the Millennium Village approach with their adolescent health programs both in and out of school. In all villages, adolescents in school receive health lessons and Dertu, Kenya has made particular progress. In Mbola, Tanzania, a successful program links young people to health and income generation.

COMMUNITY HEALTH WORKERS: FROM EXPERIMENT TO CORNERSTONE OF NATIONAL HEALTH POLICES

The Community Health Worker (CHW) program has been essential to the Millennium Villages from the start. CHWs are paid professionals who come from the community they serve and are an integral part of each village's health service. They play a critical role in helping families who have in the past struggled to find medical care, and have a particular impact on reducing child mortality and deaths during pregnancy and childbirth.

There are approximately 900 CHWs across the 14 villages in East and West Africa. Each CHW cares for approximately 100-200 households, with each household visited at least once a quarter.

VILLAGE VOICES

Mbola Millennium Village in Tanzania has made impressive progress in promoting male involvement in family health. David Isindori, a farmer of 37, is proud to bring his 11-month-old baby Mariam Daudi to Mbola's health centre. When her mother is busy, he ensures that Mariam attends the periodic child clinic and brings her in for growth monitoring, a total of three visits in October alone. He did the same for his other children, now aged 12 and 8.

"It's not common for men to be so involved in their children's health. I do it because I love them," he says.

The gaps in the ages of his children are the result of family planning, he explains.



David Isindori and daughter Mariam Daudi at Mbola's health center



A midwife holds a new born baby at a health facility in Sauri, Kenya

By taking health care from the clinics directly to remote and vulnerable communities, we hope to improve access to services, impact disease prevention, and make strides in the early detection, treatment and referral of sick individuals.

This past year, the MVP completed job aides and training curricula for CHWs which are currently being piloted, to enable them to continuously upgrade their skills. In addition, the MDG Centre aims to strengthen CHW competencies through refresher courses and performance evaluations next year. We will also improve supervision by developing a collaborative senior CHW supervisory curriculum that consolidates 10 country experiences.

What started out as an experiment in affordable, community health care is fast becoming an integral part of national health policies.

A case study on the Millennium Villages' CHW program was nominated for an excellence award by the WHO Global Health Workforce Alliance. The study was presented by the MDG Centre at the Alliance's Global Forum on Human Resources for Health in Bangkok in January 2011.

At the global level, lessons from the MVP contributed to the design of the proposed One Million Community Health Workers Campaign launched by the Earth Institute, Millennium Promise, UNDAIDS, the UN MDG Advocates, and the UN Secretary General's office in March 2011. As part of this campaign, the MDG Centre joined 40 experts on CHWs from academic institutions, UN agencies, and NGO's to consolidate decades of scientific and implementation experience in the development of sustainable CHW systems.



A community health worker and his son in Sauri.

The report provides cost and operational guidance for CHW systems, to galvanize stakeholders in support of policies that set up national CHW programs, such as those established in Ethiopia, Malawi, Nigeria, Rwanda and Kenya. It was presented by Professor Jeffrey Sachs to the UN on June 8, 2011 at the High Level Meeting on HIV/AIDS. We will continue to work at national levels to use the lessons of the MVP to influence trends in policy development.

COUNTING TOWARDS ZERO MOTHER TO CHILD TRANSMISSION OF HIV

In just two years, the Mother To Child Transmission (MTCT)-free zone project, a joint venture with UNAIDS, has proven incredibly successful in stopping mothers from passing HIV on to their babies.

Implemented in five high MTCT burden countries - Kenya, Tanzania, Rwanda, Malawi and Uganda - the Project seeks to create transmission free zones by 2015.

It seeks to achieve this by:

- preventing HIV infections among women of child bearing age in the first place
- ensuring access to family planning services by HIV+ women
- implementing proven medical interventions to prevent vertical HIV transmission
- ensuring HIV+ pregnant women, their babies and whole family receive appropriate treatment and support

In 2011, the Project made strides in strengthening health systems. The number of facilities offering comprehensive PMTCT services increased. In Mbola, for example, five new facilities compared to only one in 2010 now offer services ranging from antenatal testing to early infant diagnosis. As a result of improved partnerships, access to CD 4 testing and early infant diagnosis has been strengthened.

VILLAGE VOICES

Luli Moge, one of a new breed of community health worker (CHW), brings medical care to remote pastoralist communities for the first time.

One of the increasing number of women who have completed school in an area where the education of girls was traditionally discouraged., Luli did three months of training and now delivers primary health care to both the nomadic and sedentary population.

Female CHWs are better able to tackle women's health issues in an environment where pervasive cultural taboos mean women are often reluctant to seek advice on maternal health issues such as family planning from men.

"Ladies can be shy with their specific problems, and because I am also a woman they feel they can share their concerns with me," Luli says.



Luli Moge and fellow CHW Halima Hussein are at the frontline of community health care in Dertu, Kenya



Dertu Health Clinic

In Ruhira, Uganda as a result of close partnership with the AIDS Information Centre, HIV+ women can access their CD 4 count results in one week, a service that was almost impossible in 2010 and non-existent at the start of the Project. The percentage of women accessing CD 4 assessment jumped to 90% in the first half of 2011, from 19% in 2010. Early infant diagnosis turnaround time has been halved in all sites, with Mayange in Rwanda reporting a magic two week turnaround.

This means HIV+ children can start treatment early and HIV-related deaths are reduced.

Another leap forward is the progress towards universal Antenatal Clinic (ANC) testing – close to 100% of pregnant women are now tested thanks to the integration of HIV testing into maternal, neonatal and child health services.

Testing at ANC is a key entry point for services which prevent mother-to-child transmission. Access to ARVs both for PMTCT and for mothers' own health has greatly improved in most sites. In Mbola, access to ARVs increased to 85% in the first quarter of 2011 from 67% in 2010.

Evidence shows that male involvement increases uptake of PMTCT services by HIV+ women, and this has proven to be the case in the Millennium Villages. Using innovative interventions ranging from male champions in Sauri, Kenya, to invitation letters in Mbola, the percentage of women attending ANC whose male partners come along for testing has doubled.

Key challenges include stock out of HIV supplies and loss of follow up of HIV+ women and HIV exposed infants. Sites like Mwandama in Malawi experienced infrastructural challenges where the health facilities offering comprehensive services were inaccessible to a portion of the population. The next phase of the Project will address these challenges by strengthening partnerships with governments and other organizations to ensure zero stock out of HIV supplies and



Use of OpenMRS at the registration desk in Mayange Health Centre

family planning commodities. Community systems will be strengthened. Health workers will support CHWs in following up defaulters from the PMTCT program. Interventions will also address site specific barriers that hinder access to PMTCT services.

EHEALTH: IMPROVING HEALTH THROUGH INNOVATIVE TECHNOLOGY

Electronic health (eHealth) activities have expanded over the past two years, particularly with the introduction of the ChildCount+ system and OpenMRS.

CC+ has helped CHWs manage their workload and improve efficiency.

"The ChildCount+ system ... has been very instrumental in improving health care provision. We get notifications and reminders of activities that we should be doing such as follow-ups but may have forgotten. CHWs are also able to get monthly feedback reports from the ChildCount+ system. This is in addition to the SMS reminders and mini-reports. This has really helped us because from these reports we are able to determine any loopholes that exist and together with the health facilitators are able to determine methods of covering up those loopholes," says John Asiimwe Museveni, senior CHW for Ntungu parish in Ruhira.

CC+ has also proven effective in reducing mother to child transmission of HIV, by supporting CHWs in recruiting and keeping track of HIV+ women and their children. It is expected to increase recruitment and guard against loss of follow up.

The pilot is being rolled out in Sauri. CHWs are using mobile phones to recruit all pregnant women and to ensure they are followed during and after pregnancy, including those that are HIV+. They send this data to an interactive database, and receive reminders when the women are due for clinic visits.

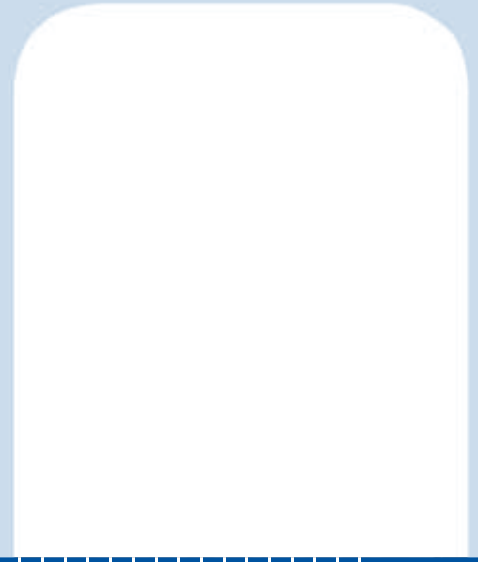
ChildCount+ (CC+) www.childcount.org

A groundbreaking application used by healthcare professionals for tracking the health of children, mothers, and newborns through mobile phones using SMS text messages, and providing reporting and decision support.

OpenMRS www.openmrs.org

An open source, clinic-based Electronic Medical Record System used at most Millennium Village clinics, which supplants paper-based record keeping for improved health outcomes.

Together, the two provide an integrated Health Information System used to support health care delivery and for monitoring and evaluation.



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Dr. Thomas K'Ouma, Health Coordinator in Sauri states: "Model mothers are mothers who were followed up using CC+ and have remained active in promoting PMTCT activities. They have now created links with male champions and they are helping us fight stigma at the community level."

OpenMRS is a big step forward over traditional paper-based medical records. The MVP has given health care givers access to the system on a web interface, enabling them to access patient information at point of care for better diagnosis. The Millennium Villages are now establishing connectivity within and between clinics. In Mbola, the immunization module of the OpenMRS application is being used to immunize all children under two on schedule.

Other innovations include the use of Verbal Autopsy to collect information on events before a death that is then used to determine its probable cause. CHWs now use Android phones to collect the data.

The success of MVP eHealth interventions have attracted the attention of a host of government partners, with whom the MDG Centre is now working on scale up activities and interoperability.

Mayange Health Center has been chosen by the Government of Rwanda as one of the sites that meets the infrastructure requirements to run the national Electronic Medical Records (EMR) system. The MVP will work with the MoH-Rwanda in implementing the national rollout of OpenMRS.

In Kenya, the Centre is working with the Ministry of Immigration, the Ministry of Health and WHO to implement Move-IT, a project aimed at improving the reporting of births

and deaths based on the ChildCount+ experience being piloted in Kenya's Rift Valley.

NUTRITION: BETTER FOOD FOR BETTER HEALTH

Two achievements stand out: the tripling of the number of children benefitting from school meals and a sharp reduction in stunting.

75% of children in the Millennium Villages now eat a nutritious meal at school, up from 25% at the start. This has had a dramatic effect on pupils' health, confidence and their performance.

The nutritional status of under twos has been improving since the start of the Project. A study in 2011 found that stunting prevalence among under twos in the Millennium Villages had declined by 43% while national levels remained unchanged in the same period. It is now apparent that by combining health sector interventions such as immunization and disease control with food and nutrition and livelihood strategies, it is possible to improve nutrition even in impoverished environments.

Our focus will remain on strengthening maternal nutrition, particularly pregnant and lactating mothers. This is in recognition of the need for a "good start to life", taking into consideration the critical window of opportunity, the first 1000 days of a child's life between conception and two years.

Adults too continue to eat their way to better health, with diversified diets of nutrient-rich foods including iron rich beans, fish, and dairy, all stemming from MVP agricultural and business development activities.

BUSINESS DEVELOPMENT

Unleashing business potential: From subsistence to entrepreneurship



From the outset, a key objective of the MVP was to reduce the dependence of rural communities on subsistence agriculture, which trapped small-holder farmers and their families in a cycle of poverty characterized by food insecurity, poor nutrition, and a vulnerability to drought and other natural disasters. In response, we empowered farmers with the skills, technologies and knowledge to produce more and better crops, and built links with markets and funding institutions to support fledgling agribusiness schemes which generate sustainable incomes.

Business development is central to achieving and maintaining progress on the MDGs, since improved incomes uphold gains in all other areas, including gender. Just as importantly, communities can maintain the gains made to date with sustainable incomes by paying for their own needs and investing back into their future way beyond the 2015 deadline. Therefore, business development is the central driver of the second phase of the Project, as we move communities on a path of sustainability through strengthening agribusiness and other income schemes.

In 2011, interventions focused on transitioning farmers to commercialized agriculture through crop diversification, optimization of land usage through water management and irrigation systems, credit-based access to inputs, productive asset financing and realizing the full value of agricultural commodities through value addition and access to markets.

STRENGTHENING RURAL COOPERATIVES

The cooperative model has proven to be the strongest driver of income generation in the Millennium Villages. By grouping farmers together, cooperatives allow them to pool their

strength, combining their output into a sizeable and profitable whole, as well as increasing their strength at market and at the negotiating table with financiers.

In Ruhira, Uganda, 32 banana marketing groups were able to bulk and market their bananas. As a result, the average price for a bunch of bananas has increased from \$1 to \$3.

“I have been able to send my two children to a boarding school because of increased banana prices” says Enoch Mukurate, a banana farmer from Ruhira.

NEW YALA DAIRY COOPERATIVE IN SAURI

New Yala has made tremendous progress over the past year in increasing its membership to close to 300, some of whom have opened accounts with Cooperative Bank of Kenya, and its capacity to receive and pasteurize over 600 litres a day, a portion of which is processed to make high quality yoghurt. A cooperative manager to improve daily operations was recruited in August, and new collection centers were opened to increase production. Plans are underway to grow fodder, and discussions were held with Heifer International to source an additional herd. As a result of its streamlined operations and strong business plan, New Yala will be one of the first Millennium Village cooperatives eligible for a portion of the \$20 million made available by the Soros Economic Development Foundation (SEDF) and Cooperative Bank loans, transforming it into a sustainable commercial enterprise.



UN Secretary General Ban Ki-moon visits Mwandama's grain bank with Professor Jeffrey Sachs



The grain bank in Mwandama

IMPROVING COOPERATIVE MANAGEMENT

In 2011 additional business and cooperative development staff joined the Project in Malawi, Uganda and Tanzania, and a Regional Cooperative Specialist was recruited at the MDG Centre. Funding from the Open Society Foundations enabled us to commission in September the first in a series of tailor-made cooperative management courses from the Cooperative College of Kenya, the leading institution of its kind in Africa. This first course targeted cooperative and business development MVP staff, government extension officers and cooperative and community facilitators from seven Millennium Villages.

Already, the Mwandama team in Malawi has put the training into action, convening a high level workshop with regional stakeholders including local government and the community, aimed to stimulate farming as a business and facilitate appropriate legal frameworks for enterprises.

“Millennium Sacco rescued us from money lenders who took our property due to high interest rates; can you imagine we were being charged 30% per month.”

Evarist Kambunda, the proud owner of a private primary school, which he started thanks to a loan from the Ruhira Sacco.

SMALL LOANS FOR SMALL BUSINESSES

Private banks have traditionally shied away from granting loans to low-income populations in rural areas. As we help move communities onto a path of sustainability, our priority is to phase out grants and subsidies and move towards credit-based systems in partnership with financial institutions offering microloans.

This process was accelerated this year thanks to an agreement with the SEDF, which saw long-term supporter George Soros pledge up to \$20 million in business loans to Millennium Village cooperatives. Once concluded, the agreement will see SEDF providing a deposit guarantee of up to \$750 000 to facilitate loans through the Cooperative Bank of Kenya. To be disbursed in 2012, these affordable loans will be reserved for legally formed cooperatives with sound business plans and sustainable financing agreements. Three are ready for funding in Sauri - New Yala Dairy Cooperative, Gem Honey Producers Society and Fish Producers Cooperative Society. The model will be replicated to other eligible cooperatives.

In Mbola, Tanzania the nearest commercial banks are located 35 kms away. The Project supported the establishment of Savings and Credits Cooperatives (Saccos) by assisting with registration, links with commercial banks and develop credit and management policies. In Mayange, Rwanda and Ruhira, savings mobilization campaigns are bearing fruit and as communities have gained confidence in the Saccos, savings deposits have increased resulting in turn in an increase in the amount of credit available to the community. Most frequently, members take out small loans to grow their business, buy agricultural inputs and pay for school fees.

MAYANGE MILLENNIUM COMMUNITY DEVELOPMENT ORGANIZATION (MCDO)

To allow villagers to make good use of the new Saccos and banking services now available to them, the MVP has been working on improving the financial literacy and entrepreneurial mindset of communities. In Mayange, this process was initiated by the villagers themselves, via a local NGO set up with MVP support. The MCDO advises members on how to formulate business plans, and disburses small business credits which reached a total of \$60,000 last year.



Sauri's honey cooperative had developed a sound business plan

"MCDO educates community members and links them to credit opportunities, creating a culture of self-reliance. The funds are expected to rotate among the whole community, everyone therefore has a sense of accountability. This will result in a more capable community," says Edmond Murasanyi, MCDO President.

INCREASING MARKET LINKAGES

Producers need a market to sell to and must be able to consistently supply the required quality and quantity. Staple crop yields have more than doubled in many Millennium Villages and we have focused on the construction of grain and cereal banks and on finding new markets for crops.

In Malawi, the Mwandama Grain Bank trades with the WFP's Purchase for Progress scheme (P4P), through direct contracting and bidding through the Agricultural Commodity Exchange for Africa (ACE). WFP has purchased 100 tons of maize through the P4P initiative and won a bid to supply additional produce through the Commodity Exchange. All trade is conducted directly between the buyer and the seller with the MVP acting as broker. Under the P4P scheme, WFP buys food at fair prices from farmers in developing countries, and the partnership is a milestone in linking farmers to local and international markets. It is hard to believe that only eight years ago, successive droughts decimated the same community which now exports surplus food.

Marenyo Cereal Bank in Sauri with some 200 members, a majority of whom are women, sold beans to WFP. The Cereal Bank is now transitioning into a multipurpose cooperative. The profits accrued have enabled the cooperative to diversify its business and it plans on paying its members a dividend in the next financial year. Likewise in Uganda, the MVP linked the Kabuyanda growers' cooperative in Ruhira to buyers and 11 tons of beans were sold in the first season alone. The development of storage facilities like grain banks helps farmers



A fish seller from Sauri prepares fish from ponds built with support from the MVP

market their crops when prices are high and reduces post-harvest losses. Previously, with nowhere to store crops, they had been obliged to sell them immediately, for fear of seeing them rot. On a smaller scale, the MVP has also provided access to grain bags. These are vermin and damp-proof bags that help villagers store their crops.

"We used to have problems of food storage. Our grains would be attacked by pests, the bags were destroyed by rats and the beans and maize could develop molds because of humidity. I would make losses of more than 10 Kgs. Now with super grain bags, I don't have to worry," says Vanise Tumuhimbise, 28 and a mother of two from Ruhira.

ADDING VALUE TO KEY COMMODITIES

All too often African farmers produce commodities that are shipped elsewhere to be processed, meaning the bulk of the profits go to middlemen outside the region. Mindful of this, the Ntungu Coffee Cooperative in Ruhira is upgrading its facilities. It has secured land for a washing station and is building an access road. Once the new washing station is up and running, the revenue the cooperative receives from its coffee will be multiplied by four.

In addition to facilitating value added products, the MVP has trained farmers in growing new crops which allow them to make better incomes. In Sauri, fish farming has witnessed rapid growth expanding from 12 farmers in 2008 to 246 in 2011, managing a total of 453 ponds. This year alone, earnings from fish farming generated over \$21,000. Other Sauri villagers have chosen to go into greenhouses and drip irrigation systems, improving earnings with high-value crops like tomatoes, capsicums and watermelon which fetch higher prices than staple crops.



Doreen Ayabake shows off the sewing machine she was able to buy with profits from the beaded jewelry she made in Ruhiira

WOMEN IN BUSINESS

Women have been the focus of MVP business development activities. The Unilever Women Direct to Home Distribution Project started in 2009 as a partnership between Unilever, MVP and CISP, an Italian NGO. The Malawi Investment Promotion Agency (MIPA) plays a facilitating role. Poor women in rural areas conduct door-to-door distribution of Unilever products such as washing powder to generate income. The project has taken off and is being scaled up to Gumulira Millennium Village. The new phase will include a revolving fund.

In Ruhiira, 16 villagers, 15 of them women, were trained in glass bead jewelry and marketing skills. One of the first to be trained was Doreen Ayabake, 17, who showed remarkable business acumen. By saving the money she made by making jewelry, she has been able to buy a sewing machine, the first step towards her dream of becoming a fashion designer.

"I always wanted to have a sewing machine. I love sewing and now I can do my own dresses," she said.



Basket weaving and knitting cooperatives in Mayange, Rwanda have achieved impressive results.

KNIT YOUR WAY OUT OF POVERTY

In Mayange, 74 women considered vulnerable were trained and provided with equipment to start a knitting cooperative by the MVP in 2008. The cooperative has grown and upgraded its equipment. It supplies uniform sweaters to four big schools in the district and has also won a contract to supply Rwanda Knits, the country's leading exporter of knitted products.

The women can now make far in excess of what they would have earned for casual labor. Lydia Mukamusoni, 44, and Virginia Mukamana are two of the knitters. Lydia is married with nine children. She owns no land and she used to eke out a living as a casual laborer on other people's farms. The seasonal nature of the work made it difficult to feed her family year-round. With knitting, both women have been able to build houses. Lydia has also paid for health insurance for her family, brought a goat, treated herself to presentable clothes and started saving on a bank account.

Mayange basket weavers have attracted the interest of Tommy Hilfiger which has given the weavers an order to supply colorful baskets to be used in instore displays and marketing campaigns in Hilfiger stores abroad from 2012.

KEEPING UP THE MOMENTUM

Much of course still remains to be done, and our efforts to convert cooperatives into sustainable profit making enterprises will continue in 2012. We aim to source more start-up capital and partner with financing bodies, as well as develop village banks and revolving funds to get round the high interest rates charged by some microfinance institutions. We will provide farmers with ongoing training in business skills, and reinforce the concept of loan repayments in places where people are not accustomed to the credit system. We will also establish new markets so that the impressive increases in produce can translate into further income gains for farmers and their families. Innovative projects slated for 2012 include the development of cultural and ecotourism opportunities.



WATER AND SANITATION

A simple way to better health

Students at Ilongulu Primary in Mbola, Tanzania, were excited to see water flowing from the tap for the first time in their life following the launch of Mbola's piped water project in November.

Providing clean water and adequate sanitation is central to achieving the Millennium Development Goals - better irrigation and water storage facilities improve food security and help to reduce hunger, whilst improvements in sanitation underpin gains in all areas of health.

Unsafe drinking water and inadequate sanitation and hygiene contribute to 88% of diarrhoeal deaths - 4,000 children under five die every day. Our aim is to make sure everyone has access to 20 litres of water per day, within a distance of 500 meters from an improved water source serving no more than 400 people. At the same time there should be an improved sanitation facility, normally a latrine, within 50 meters of every home and used by no more than 20 people.

Access to water reduces farmers' reliance on cyclical rainfall, allowing them to move from subsistence agriculture to more productive and sustainable agribusiness enterprises. Bringing water to communities significantly reduces the burden of fetching water on women.

We are pleased to report that as of 2011, our water and sanitation interventions have brought us close to 100% coverage across all our sites.

More than 530 kilometres of water pipes have been installed, bringing safer water points to tens of thousands of homes. Other interventions have included spring protection, construction and rehabilitation of shallow wells and boreholes, and rainwater harvesting.

This fourfold increase in access to safe water is complemented by a threefold increase in access to improved sanitation Project-wide. Following MVP interventions and sensitization campaigns which encourage people to adopt hygienic practices, all Millennium Villages achieved better sanitation coverage than the national average. Koraro, Ethiopia and Gumulira, Malawi are both close to achieving 100% coverage. The importance of this is clear considering that an estimated 94% of diarrheal diseases – the second leading cause of death among children under five – are attributed to unsafe drinking water, inadequate sanitation, and poor hygiene.

The fight to eliminate open defecation in Gumulira paid off with an increase in basic sanitation coverage from 12% to 85%. The promotion of household water treatment using the water purifier PUR, provided through a partnership with Procter & Gamble in Mbola, Tanzania, in Ruhira, Uganda and Sauri, Kenya showed significant reductions in diarrhoea for children under five.

IRRIGATION FOR BETTER NUTRITION AND INCOMES

Following on from food security gains achieved so far, irrigation is one of the key ingredients of agribusiness development in the next four years. For small-scale irrigation projects, farmers are forming cooperatives and taking out low-interest loans. For larger ones, the MVP is ensuring that farmers acquire the necessary management and technical skills while guaranteeing repayment of the investment – after which the farmers will take full responsibility.



Justine Twinomugisha's restaurant business is boosted by the presence of water next door in Ruhira

Koraro, Sauri, as well as Mayange, Rwanda and Mwandama in Malawi have all adopted unique irrigation approaches.

Some of the most dramatic achievements were in Koraro in Ethiopia's arid north. The region's 500mm annual rainfall, which falls between June and September, is inadequate for rain-fed farming. As a result, agriculture was not a sustainable option and local people depended on social welfare and safety net mechanisms.

In response, the MVP implemented irrigation works, together with intensive soil and water conservation activities, and built facilities to recharge groundwater. The MVP also supported farmers with credit facilities to procure irrigation equipment. So far, 744 treadle pumps and 170 diesel water pumps have been provided.

As a result, the area under irrigation in Koraro increased sevenfold to over 1,800 hectares and farmers have already started reaping the benefits. They have been able to grow more diverse crops in larger quantities. Subsistence agriculture is shifting to more lucrative commercial horticultural production, and incomes have increased by 72% on average. Nutrition has also improved because of the increased availability of vegetables.



"I built a new house and bought furniture including a bed. I also bought a dairy cow and repaid credit on my farm inputs and pump."

Hailemariam Admasu, a farmer from Koraro, said that irrigation has enabled him to multiply by six the area he cultivates, which has improved his income.

Mayange Millennium Village is located in the semi-arid Bugesera district. Prior to the start of the Project, most farmers were not able to feed their families during times of drought. In response, the MVP and Ministry of Agriculture introduced farm ponds to boost crop production. Since 2007, 52 ponds have been built and farmers have been supported with agro-inputs such as seeds and fertilizers, as well as treadle pumps and drip irrigation systems.

As a result, farmers now grow crops such as tomatoes, watermelon, cabbage, eggplant and onions. One farmer, Mr. Absalom, was able to make \$2,400 from the sale of watermelons, which he also supplies to a local supermarket. He supplements his income with farming vegetables.

WATER MAKES HISTORY IN RUHIIRA

Community members identified their most pressing problem as lack of access to water when the MVP was first launched in Ruhira in 2006. Nearly all 6,500 residents live on hilltops, and most water sources are deep in the valleys. The daily task of fetching water falls largely to women and children, who often travel more than two kilometers several times a day to fill their 20-liter containers.

"It is so difficult for women – especially pregnant women and those with children – fetching water while carrying their babies uphill," notes Justus Tweheyo, the local council chairman of Kakoni in Ruhira.

Safe water coverage increased from 7% to 45%, due to measures such as spring protection and the provision of shallow wells. As of August this year, coverage will increase much further since the MVP installed Ruhira's first pumped water distribution system.

Hundreds of people gathered to see the water flow from the taps, torn between joy and disbelief. For the first day in Ruhira's history, the water came to them.

Treated water is now pumped to a central holding tank. Gravity does the rest of the work, delivering water to 40 tap stands along three distribution lines.

Robert Ayesiga, Ruhiira's infrastructure coordinator, estimates that upon completion, the system will provide 115,000 liters per day. This will rise to 350,000 liters when an additional spring is connected. Access to this volume of water is unheard of in Ruhiira, where the average family of five gets by on 40 liters per day. This ambitious Project marks an infrastructural first for the 14 Millennium Villages.



"Water was a big problem in this village, we used to buy expensive water or move long distances to the valley to fetch water. I now have time to concentrate on my business and attend to my customers since the piped water is right outside my restaurant. I used to spend a lot of money to buy water and that would encroach on my profits. We are very happy for what Millennium has done; we no longer worry about getting water."

Justine Twinomugisha, 36, a mother of 5, joins in the excitement in Ruhiira.

MAKING WATER POINTS SUSTAINABLE

As we near the 2015 deadline for achieving the MDGs, a gradual reduction in funding for infrastructure interventions Project-wide means that few additional water sources will be developed. Our focus will be to ensure communities can manage and sustain water facilities already provided, and to hand over centralized water sources, such as piped water systems, to local authorities to ensure sustainability.

Ruhiira's new water system, for example, will be a paid service, with revenues intended to cover maintenance and running costs, and improvements. Schools, businesses, health centers and private homes may request a metered tap, whilst individuals will pay at the tap stand for each jerry can filled. In Mbola, user groups were formed to manage the new



Marceline manages a new water point in Mayange, Rwanda with her husband

water infrastructure in the long term. One group, Tumaini, has already built a fence round their water point and started levying fees. Group members pay a monthly fee while non-members pay for each 20-liter bucket they fill. Once the group has raised sufficient funds it will build another water point for members who live a long way away.

In the next four years, we will focus on achieving 100% coverage of improved water sources and on making them sustainable, alongside sanitation interventions.



EDUCATION

Building a brighter future for a new generation

According to the second Millennium Development Goal, by 2015 every child should have the opportunity to complete primary schooling. All too often for rural African children this has remained a dream. Schools are few and far between, parents lack money for fees, books and uniforms, and a child in school is one fewer child tending animals or minding siblings. In the first five years, we therefore channeled investments into physical infrastructure to expand the capacity of school systems. This resulted in a remarkable improvement in attendance. In 2011 we scaled up interventions aimed at improving quality education and increasing pupils' motivation and energy. In addition to building classrooms and training teachers, we focused on making school attendance more attractive, notably through meals and computers.

School facilities such as buildings, desks and latrines contribute greatly to education by creating an environment conducive to learning, and their construction continued across all the Millennium Villages in 2011. In Mwandama, Malawi, new all-weather classrooms boosted education standards as classes are no longer disrupted in the rainy season. The MVP helped build six classrooms in three primary schools this year. The combination of the new classrooms and the introduction of school meals helped increase attendance to 95% in 2011. The dropout rate fell to 13% from 26%.

Safe water supply and sanitation, and the ensuing health benefits, are also conducive to learning. A big focus for 2011 was the completion of facilities such as latrines and water points in schools.

In many parts of rural Africa children are too hungry to concentrate when in class, often eating only when they return from school. The MVP school feeding program has been successful beyond expectations. It has increased enrolment, reduced drop out rates and absenteeism, and improved performance.



A student helps to grow school meals at Nyamninia Primary in Sauri, Kenya

School meals programs in Mwandama, Koraro in Ethiopia and Ruhiira in Uganda are implemented in partnership with the World Food Program (WFP). In Sauri, Kenya, it is the pupils, parents and teachers themselves who lead the way, and one school, Nyamninia Primary, has been recognized as one of the leading school feeding programs in the country this year. Volunteers grow fruit and vegetables, rear cattle, and raise chickens, to produce enough food for nutritious school meals. Profits from the sale of surplus food are invested back into the scheme and used to buy provisions for the most needy children such as books and uniforms.

The educational aspect of children's involvement in the program is a big plus, imparting agribusiness skills, nutrition information, as well as great confidence in the students. Results from Nyamnia Primary have improved from a mean score of 208 to a new high of 325, whilst attendance has gone from 710 pupils in 2005 to 875 in 2011. Based on this success, 12 more schools in Sauri are slowly adopting this model.

In some Millennium Villages, such as Mayange, Rwanda, the culture of reading, writing and research was not widespread – the aim of the Project's Library Initiative that started in 2010 was to encourage these practices.

"We had books scattered all over the place. The Project supported us in putting up this library, they provided more text books and furnished it. Now more students and local people come to read and borrow books," says Mrs. Faina, the librarian in Mayange.

In 2011, the Project added more textbooks and helped construct a second library. Other sites have supported similar initiatives - books and teaching aids were provided for two secondary and fourteen primary schools Mwandama, for example.

Information Communication Technology (ICT) equips students with the skills to fully partake in the modern world. It also makes learning fun and helps overcome low teacher-pupil ratios. In Ruhiira, Nyakamuri School built on its 2010 acquisition of five notebooks from Lenovo Cooperation to integrate ICT into teaching and learning. Virtual encyclopedias, e-books, dictionaries and educational videos are now used in all the major subjects taught. Teachers also use spreadsheets to create mark sheets and presentation software for delivering their lessons.

"Computers have changed the way the children learn, all I see is a set of interested learners. I am a bit worried because some of my teachers spend half the night in the lab trying to learn everything," says Flugencia Kakiiza, Headteacher at Nyakamuri School.



An ICT lesson takes place in Mayange, Rwanda.

ICT holds the key to solving the problem of perennial staffing shortages in schools in the developing world, where some schools have only one teacher for 120 pupils. Through ICT, thousands of children across the continent can access a single lesson delivered by one teacher.



Dairy cows in Nyamnia Primary School provide milk for the school meals program in Sauri

Training, supervision and incentive schemes are all boosting the quality of the teaching dispensed. In Mwandama teachers received curriculum and methodology coaching and were trained in life skills, nutrition, HIV/AIDS and computer skills. In Ruhiira training has been one of the major activities for the year, with many teachers testifying they now feel much more confident.

A school supervision system has helped teachers comply with best practices. The MVP also annually takes head teachers from Ruhiira to tour schools with a reputation for excellence. The head teachers who best apply the new ideas in their own schools are rewarded

In Ruhiira, the Project also built houses for teachers to attract and retain them, while in Mayange teachers who dispense additional tuition receive overtime pay to motivate them, financed by both parents and the MVP.

Next year, we will lay a firm foundation for primary school entrants by placing greater emphasis on pre-school education to ensure children enter school at the appropriate age. The MVP will continue to sensitize parents about the importance of sending children to school at the right time. We will continue to improve the quality of education through teacher training, and to support girls' education through life skills programs and empowerment interventions, and providing sanitary napkins. Finally, the MVP will support transition to secondary school through scholarships, mainly targeting bright girls from disadvantaged families.



GENDER

Towards gender equality: Fewer chores, more opportunities

Incomes from activities such as basket weaving have empowered women at household and community level.

Promoting gender equality and empowering women is the third Millennium Development Goal and it runs centrally through all Project activities. One of the cornerstones of our education strategy is getting more girls to enroll in school and complete their studies. In the same way, many of our infrastructure development schemes are aimed at reducing the time women spend every day on chores such as fetching water, tasks that prevent them from achieving greater things. We also tackle cultural barriers such as early marriage that hold girls back.

Given the increasing emphasis on business development we have worked in particular to ensure women's participation in income generation. Giving women new skills and income generating capacity produces an instant positive effect across the Millennium Villages. Women invest back into their families, using their newly-earned money to pay for things like medicines and schooling for their children.

A variety of such schemes have helped women lift themselves out of poverty through crafts in Rwanda and Uganda, baking bread in Malawi and farming pigs, fish and goats in Rwanda and Kenya.

"Traditionally women wove baskets for use at home, but work outside the home was not encouraged. Now we give up some domestic duties to focus on making baskets," says Chantal Nyirabambari, Chairwoman of the Mayange basket weavers' association in Rwanda.

Furthermore, adult education classes in Sauri, Kenya, have started to provide women with literacy and numeracy skills, as well as the confidence to make decisions about household purchases and investments. In Ruhira, Uganda over 200 women were trained in entrepreneurship and business skills this year alone.

"The training opened my eyes and I realized that women can also do business" says Tumuranye Provia, the owner of a new clothes shop in Ruhira trading centre.

The classes also cover the financial management skills necessary to allow women to utilize the banking and loan schemes initiated by the Project to grow their wealth.



"My husband is disabled and stays at home. Before, we were not happy together because I did everything in the house and we had no income. Now with weaving life has improved a lot. My husband has learned to do things around the house. We can spend more time together and we have built a house from the money."

Alvera Bazizane, a mother of five, explains how things have changed for the better since she took up commercial basket weaving in Mayange.

“Before Millennium we had almost nothing, but when Millennium came, we the women were sensitized through the gender mentors. I opened an account with the village bank and since then my life has changed” says Vanise Tumuhim-bise, 28, a mother of two from Ruhiira.

One of the core aims of the Millennium Village Project is to make education as accessible to girls as it is to boys.

KEEPING GIRLS IN SCHOOL

Families often think schooling for boys should take precedence over schooling for girls. Traditionally girls have spent several hours every day on chores such as preparing food, looking after younger siblings and fetching water. Even where girls have attended school they have very often been obliged to cut short their schooling for early marriage.

The MVP has tackled all of these issues.

In Mwandama, Malawi, gender clubs were set up within schools with the aim of sensitizing communities to the importance of education for girls and allowing girls to share ideas and encourage one another. As a result, the enrolment of girls in Mwandama is now higher than that of boys. The clubs have also helped to bring back girls such as Maria, 14, who dropped out of school four years ago largely because of her family thought marriage to be the best option for her. Students in the gender club encouraged her to come back.

In Sauri, guidance and counseling programs have been strengthened with deliberate focus on adolescent reproductive health issues with a view to addressing the problem of teenage pregnancies that cause girls to drop out of school.

Sanitary pads are often unavailable or prohibitively expensive, and girls are forced to miss as much as a week from school every month once they hit puberty. To alleviate this problem, the Ruhiira team is testing a hybrid, reusable envelope that can be stuffed with absorbant material.

Commonly, although girls may attend primary school in greater numbers, they drop out at secondary school level due to financial difficulties, and the Project has implemented a scholarship scheme to counter this trend.

In Koraro, Ethiopia, the MVP supports 66 girls from Hawzien secondary school, which has helped them to avoid early marriage common in the area.



Men have started helping in domestic chores as women's role in household income generation increases.

This year among the female students assisted by the MVP, 23 got scores high enough to enter university – the highest number of successful female students ever recorded there.

“I couldn't attend school properly and my grades were poor,” said Alagabirhan Aregawi, 17. But in the second semester, the MVP started to support girls.

With this support Alagabirhan saw her grades shoot up. She got one of the best scores countrywide in her school leaving exams and a place in the health department at the prestigious Mekelle University. The help with rent was particularly significant, Alagabirhan explained, as it means female students no longer have to pile into cramped compounds where they are unable to study and become easy prey for young men.

“I knew cases of pregnancy and girls who were forced to drop out as the result – that is on top of those who dropped out because of financial problems,” she said. “Millennium Villages shaped my destiny. In the future I will support myself, my family and my country.”



“Some of my classmates laugh at me because of my age but I ignore them because I want to learn and have a future. I want to train to be a nurse.”

“I am grateful to my fellow girls and my teacher who approached me and my mother to consider coming back to school. I now realize that school is very important for my future.”

Maria, 14, from Mwandama, is four classes behind the other children of her age.



AGRICULTURE

Growing nutritious foods for better health and incomes

A successful greenhouse farmer from Sauri surveys his crop

Over 70% of Africa's population lives off subsistence farming. Agricultural productivity is hampered by rising population pressure and declining soil fertility, which in turn reduces per capita food production every year. Farmers tend to concentrate on the same low-value crops. Moreover, the majority of farmers have neither access to nor the knowledge to use improved agro inputs and so the nutrients lost through farming are seldom replaced. Consequently, a big part of the population of Sub-Saharan Africa lives in poverty, with over 33 million children under five malnourished.

Increasing food security by reducing rural Africa's dependence on seasonal, rain-fed crops, has been a key priority of the Millennium Villages Project since its inception. Food security is the foundation stone for the success of all our other interventions and is key to achieving the first Millennium Development Goal – halving the proportion of people who suffer from hunger.

The Project has been making steady gains towards this Goal, and 2011 was no exception, with tremendous reductions in poverty levels, food insecurity and undernutrition. Farmers have been encouraged to diversify what they grow, to include high-value and nutrient-dense crops and to improve soil fertility practices. We have also focused on efficient post-harvest handling, converting raw produce to higher value items, and building market linkages, with a view to transition farmers from subsistence to commercial activity.

Inputs like improved seeds and fertilizers, coupled with irrigation and farmer training doubled - and in some sites quadrupled - maize yields in the first few years. In Mwandama, Malawi, the results have been spectacular, with two or three harvests a year instead of a single one before the inception of the MVP and yields rising seven-fold.

As a result, farmers in the Millennium Villages can now allocate a smaller patch of land to grow just enough staple crops for household consumption. They are able to devote the rest of their land to market-orientated crops with improved irrigation and MVP training.

In Mwandama, high-value crops including eggplant, soya and pumpkins now enrich people's diets and incomes. In Mbola, Tanzania, fields used to lie empty for months between the one cropping season. Now, farmers use irrigation to alternate their main staple crop with nutritious and high-value vegetables during the "off season". New farming techniques have borne fruit even in Dertu, which lies in the arid lands of northern Kenya, proving that with the right methods yields can be improved whatever the environmental conditions.

In Mayange, Rwanda, Mr. Thadere has never looked back since he switched from maize to growing fruit at the start of the MVP. Recognizing that his small plot was better adapted to a high-value crop, he went in for fruit and fruit tree seedlings.



Mr. Thadere is one of Mayange's leading farmers, and won a cow for his successful fruit and vegetable crops in a nation-wide competition.

The MVP helped him to set up a rain harvesting facility, which has three months of storage. Soon, plastic pipes donated by JM Eagle will bring water to irrigate his orange and mango trees.

"We used to move to other parts of Rwanda, to leave home to fetch food. We would try to farm with the seeds we brought, but seeds would not survive because we didn't have the right technology and there was drought. Now with technical training from the MVP and better seeds, we can harvest crops," he says.

In Sauri, Kenya some 246 farmers have gone into fish farming. John Agina used his savings to dig four fish ponds. The MVP supported him and others with training, pond design, vent and drainage pipes, the initial batch of fingerlings and feeds. As a sustainability measure, a cooperative was set up to market the produce, and a group of farmers were trained on fingerling production to ensure that ponds can be continuously restocked by the villagers themselves.

Sauri's farmers have also taken up greenhouse farming, rotating tomatoes, capsicum and water melon. Kevin Achola Yieko, 28, has a greenhouse consisting of a frame he had made himself covered with ultraviolet treated polythene sheet provided by the Project. A drip irrigation system and a water tank were also provided. This allows Kevin and 42 other farmers to produce more crops in less time, and ensure that harvests coincide with high market prices. Crops are also protected from adverse weather conditions, pests and disease.



A successful fish farmer shows off his catch in Sauri, Kenya

In March this year, over 60 delegates from the Alliance for a Green Revolution in Africa (AGRA) visited Sauri's farmers during a high-level conference held in Kisumu, Kenya. Stakeholders, including representatives from AGRA, the private sector, the Earth Institute, and MVP project staff developed a strategy document outlining the next steps to combat food insecurity and environmental degradation in Africa.

Across the border in Ruhiira, Uganda, the focus was on introducing nutrient-dense crops such as iron rich beans and orange-fleshed sweet potatoes, dramatically improving nutrition. Post-harvest losses were reduced via special damp and vermin-proof bags for improved grain storage.



"I make more money from the same plot with fish farming than what I was making from growing maize."

Fish farmer John Agina now buys his own fingerlings and is about to start his own breeding unit in Sauri.

In the coming years we will build on the gains made so far to allow farmers to transition from subsistence farming to profitable agribusiness cooperatives. In addition, we have developed guidelines based on our experience, which can be adopted by other villages, districts, and countries to replicate our success. These agronomic extension packages cover staple foods, high-value crops and livestock, and encompass inputs like seeds and fertilizers, as well as technologies and methods like drip irrigation. MVP staff in four countries have received training on package implementation, and will promote these approaches among farmers in 2012.



INFRASTRUCTURE

Moving from physical building blocks to virtual ways forward

While the Millennium Development Goals are expressed in terms of outcomes for human health and welfare, one should not underestimate the importance of investments in energy, roads and transportation, ICT and water infrastructure in achieving the Goals.

Physical isolation compounded poverty in the Millennium Villages before the start of the Project. Skills, knowledge and technology in areas such as efficient farming practices or ICT had no way to reach communities, and with few roads villagers lacked access to markets, clinics and schools. Without water and food storage facilities, communities suffered from the vagaries of climate like drought and flooding, trapped in a cycle of poverty.

As a result, our initial efforts focused on providing basic infrastructure, including repairing and building clinics and schools, and expanding mobile telephony coverage. We also rehabilitated bridges and roads, and introduced innovative solutions such as solar lanterns and ICT services for health management.

In 2011, energy sector interventions focused on electric grid extension to markets, schools, clinics, and community facilities, providing coverage to approximately 50% of households. Uptake was promoted by limiting connection costs to \$50, with the help of loans or installment plans. Power has had a huge impact in attaining other socioeconomic goals, lighting up the lives of villagers.

Where grid extension was difficult, the MVP pioneered SharedSolar microgrids, which supply eco-friendly solar power for up to 20 households in remote areas. A key to the system's popularity has been its cost-effectiveness, allowing villagers to pay only for what they need, when they need it

using a simple, SMS-based "pay-as-you-go" model. The system will be rolled out to all the sites throughout 2012.

In phase two, our focus shifts from physical infrastructure to the virtual connectivity of ICT, and linking the Millennium Villages to mobile and internet "highways" to accelerate progress on socioeconomic gains. The digital and mobile revolution sweeping through Sub-Saharan Africa is fast becoming a driving force for economic development, and thus the MVP is working to integrate mobile technology into all sectors of its work.



"Better lighting means our school children can study well into the evening. Health clinics and small businesses can stay open longer, and people can communicate and conduct business with the outside world."

Dr. Gerson Nyadzi, Team Leader and Science Coordinator at Mbola, Tanzania.

MVP interventions mean mobile phone networks are now within two kilometers of 80% of households and data connectivity has been provided to key institutions like schools, clinics, and ICT kiosks. Innovative mobile phone-based health services like ChildCount+ are having tremendous impact on health delivery. Farmers can now check prices for their produce before going to market, and make transactions over the phone. Newly-built schools are networked to the outside world. These achievements have been facilitated by partnerships with regional network operators.

Though often overlooked in infrastructure deployment, ICT played a key role, allowing better management of health delivery, timely access to emergency medical services, as well as better health information. Villages have better access to mobile exchange remittance, credit, and banking.

Going hand in hand with reducing the isolation of the Millennium Villages are transportation interventions. The MVP is working towards having at least half of the community within two kilometers of an all-weather road. The focus in 2011 was on rehabilitating main roads that connect the villages to national networks.

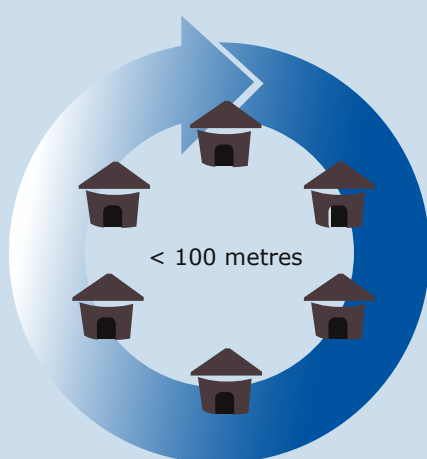
Important lessons from the MVP highlight ways in which the MDGs can be attained using infrastructure change, and pertain to broader policy and community applications.

behalf of the community by a local youth group trained for the task.

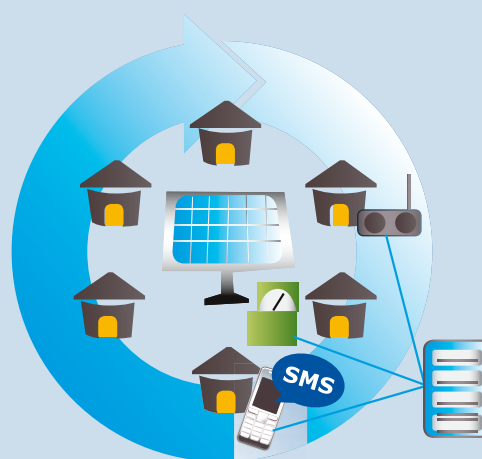
As the MVP phases out funding for physical infrastructure over the next five years, we must address the maintenance and sustainability of facilities constructed so far. These are two of the MVP's biggest challenges. Using information technologies and working closely with local governments and communities, the MVP is developing a combination of human resources and information chains that connect them to deliver maintenance and operation services.

Where possible, the MVP is handing over infrastructure to applicable partners. For public works such as roads and clinics, funds must be in place for continued operations, which the MVP is coordinating with local governments.

To bring electricity to Millennium Village residents in remote areas where grid extension is difficult, the SharedSolar system links households to a solar-powered mini-grid. Customers pre-pay for power using mobile phones. The system works like this:



1: Location identified for central power system within 100 metres of consumers.



2: A solar power system generates electricity. Transmission lines run from the meter to each consumer. Consumers add energy credit to their account via SMS on their mobile phone.

For example, electric power has historically been difficult to implement in Sub-Saharan Africa, despite its critical importance to development, because of low population densities coupled with high deployment costs. Implementers must take advantage of high densities where they exist, whilst reducing costs through proper design and procurement.

Transportation interventions can have important impacts at relatively low costs. In Dertu, Kenya, for example, a "village vehicle" offering cargo transport has reduced the cost of reaching distant markets and thus boosted income for villagers. Villagers pay to use the vehicle and, in addition to offsetting operating costs such as fuel, this has also covered the salary of an additional teacher at Dertu Primary. Initially purchased by the MVP, the truck is now managed on

In the case of water and electricity, interventions can pay for themselves, for both initial costs (household fees for electricity connections, for example) and recurring costs (such as fees for drinking water).

In Mbola, Tanzania, villagers pay a small fee for drawing water from the newly constructed water points. A community member manages the process by collecting fees, which are then invested back into any necessary maintenance.

The MVP is building the capacity of small operators and local communities to look after infrastructure, as local ownership is the key for long-term sustainability. Finally, MVP-introduced mobile applications are to be utilized to improve collection of payments, implement provision of lifeline services for the poorest, and monitor infrastructure performance.



ENVIRONMENT

Protecting nature for better lives

A farmer examines the grass he has planted to enrich the soil, feed his cattle and divert pests, which eat the grass rather than maize.

Environmental interventions which improve soils, biodiversity and access to clean air and water pave the way to achieving all the MDGs. The first five-year phase of the Millennium Village Project illustrated clearly that managing the environment is integral to our success, and that worthwhile environmental work requires long-term thinking and investment.

The depletion of Africa's soils of key nutrients has been a contributing factor to the cycle of poverty in which many of the continent's rural populations are trapped. It has meant a steady decline in productive agricultural land and yields of staple crops, contributing to hunger and under nutrition, and meant that many farmers were not able to feed themselves nor their families.

One of the foundations of the MVP's environmental program has therefore been the promotion of Integrated Soil Fertility Management (ISFM). This entailed encouraging the production and use of compost, manure, use of leguminous cover crops, natural and improved fallows, and increasing the use of appropriate fertilizers. The use of crop residues, such as maize stalks, as well as biomass transfer, for example by moving banana leaves to more exposed parts of the farm was also promoted. Another key activity has been tree planting and land use change.

Results from the first Millennium Village in Sauri, Kenya, indicate significant progress. Farms on average now practice soil fertility management on 17% of their land, up from 7% at the start. Biomass on farms has more than doubled and

the number of tree species has risen to 15 from six previously, as a direct result of the MVP promoting tree planting.

In tandem with agricultural interventions, Sauri's soils now yield 4 tons per hectare, more than double the yield levels in 2005, and this success has been replicated across the Millennium Villages.

Trees are a valuable resource in rural communities, essential for uses such as firewood and building material, but this usefulness has resulted in severe deforestations and biodiversity loss. Without trees to trap rain water in the soil and canopy, many villages experienced erosion and water runoff prior to the start of the Project. In response, Sauri in 2011 raised about one million forest tree seedlings. In addition, they planned to raise 145,000 of fruit tree seedlings and exceeded this target by almost 50%. This and previous years efforts' on improving tree cover led to the United Nations Environment Programme (UNEP) awarding Sauri a certificate in the "Plant for the Planet" campaign.

In Nyandiwa, Sauri, the community forest association convinced local people to replant Got Kombiro hill and protect it for bee-keeping and recreational use. In just two years the area has gone from scrubby trees and patchy grass to luxuriant greenery.

Ruhiira Millennium Village in Uganda continued to emphasize soil and water conservation measures. During the year, over 1,000,000 tree seedlings and 50 orchards were established.



Putting the finishing touches on an energy-friendly cook stove.



Lake Cyohoha, a threatened wetland environment near Mayange, Rwanda

In Mbola, Tanzania, nurseries and tree planting are linked to income generation and gender interventions. Women from poor backgrounds were taught to mix soil with fertilizer and then turn pot filling and seedling management into a business. The argument was that women are the ones hardest hit by environmental degradation and therefore the most motivated to fight it.

“

“This is much better than farming, which only gave me seasonal income, because I can earn money every day. I have sold 150 cook stoves so far. I have a cook stove at home and am very happy with it because I don't need so much firewood anymore, I save time, and the smoke is reduced.”

Onorine Uwamahoro, a cookstove producer and reseller from Mayange, Rwanda

“In our village this is the only activity where women can earn wages,” says Mama Irene, a farmer from Mbola, who is part of the tree nursery management project.

In Mwandama, Malawi, communities have adopted their own environmental campaign called “change4ever”, which promotes tree planting. 21 villages were sensitized on environmental management including nursery fence construction, forest seed sowing, making fire breaks and using rather

than burning crop residues. Mwandama, like Sauri, raised a million seedlings.

In Mayange, Rwanda, work continued on fruit tree grafting and tree planting, and environmental protection. The conservation of wetlands and water bodies took on more prominence in direct response to pressure from the national government to establish a 50 meter buffer zone around all threatened lakes. Lake Cyohoha, near Mayange, is one of these, and the MVP has identified 100 ha for a buffer zone of which 27 ha will be protected by trees planted by the community this year alone.

Energy efficiency runs through our infrastructure and environment programs, and one of the MVPs key innovations has been the SharedSolar initiative, detailed in the infrastructure chapter of this report. Energy efficient cook stoves is another, and Mayange in particular has progressed in production, distribution and community sensitization to the new stoves in 2011. The stoves require only a fraction of the wood that would have been used for a traditional cooking fire. Members of the community were taught how to make the stoves and their energy saving benefits. In addition to requiring less wood for fuel, the stoves have improved air quality and created jobs and business opportunities. Links to the carbon market for the stoves are being explored.

The vision in the coming years is to continue with the ground-work on sustainable land and water management combined with renewable energy, and introduce new and exciting environmental innovations such as the SharedSolar initiative.



DRYLANDS

Improving lives in arid lands

The drylands of the Horn of Africa made world news headlines for all the wrong reasons in 2011 with millions hit by a bruising drought exacerbated by insecurity. The international community was criticised for stepping in at the last minute, rather than investing in long-term programs which could have mitigated the force of a foreseeable disaster.

Already, the estimated 30-50 million pastoralists living in the drylands represent the world's poorest and most marginalized people. Ever more-frequent and more severe droughts make it all the more important to put in place sustainable measures that will make dryland communities better able to face up to the vagaries of extreme climatic conditions.

The Drylands Initiative points the way forward to how we can move beyond emergency relief to full-scale sustainable development in the Horn of Africa. It aims to ensure that pastoralists benefit from the same integrated, grass-roots projects on animal production, infrastructure, health, education and business that have improved lives in the Millennium Villages.

Pastoralists often depend on crossing national boundaries as they follow viable pastureland across political borders. Any viable solution therefore requires political cooperation of the entire region, and six countries have come on board: Kenya,

Swathes of East Africa do not receive any rain for months at a time

Uganda, Ethiopia, Somalia, Djibouti and Sudan. A regional alliance of dedicated ministers and synchronised work plan for the initiative was drawn up at the Drylands meeting in January in Addis Ababa. The meeting was chaired by UN Secretary General Ban Ki-moon who gave his full support to the Initiative:

“Reducing poverty and increasing productivity in drylands is not just important for people’s well-being. It is essential for the stability and sustainable development of the region and the the continent,” he said.

In the face of the urgent challenge of the drylands, new partners are coming to the fore. Our partnership with the the Islamic Development Bank (IDB) is a significant milestone, and particularly appropriate given the IDB’s pioneering work in many arid countries in Africa and the Middle East. Columbia University through the MDG Centre and the Earth Institute signed a Memorandum of Understanding with the IDB in June 2011. The partnership represents a stepping stone from inception to rapid implementation of the Initiative in 2012.

In July, the world’s attention was drawn to the devastation taking place in the Horn of Africa as a result of drought, insecurity and inaction. The Prime Minister of Kenya called for an urgent Horn of Africa Heads of State Summit on the crisis in

September, held in collaboration with the MDG Centre and bringing together Heads of States, UN agencies and the donor community.

Professor Jeffrey Sachs, Director of the Earth Institute and Special Advisor to the UN Secretary General on the MDGs was invited to chair the regional component and present the Drylands Initiative. As a result, the MVP's long term solution to boosting resilience of drylands communities to climatic shocks such as drought and diminish their dependency on emergency relief is now serving as a model for the region.

Ethiopia, Somalia, Kenya, Uganda, Djibouti, and South Sudan adopted this approach via the the joint declaration entitled 'The Nairobi Strategy: Enhanced Partnership to Eradicate Drought Emergencies'. The strategy is a comprehensive tool for individual countries and regional organizations to counter the effects of drought in the long term, and Kenya must be commended for its leadership and clear paradigm shift away from repetitive emergency response to sustainable development.



Mourid Abdi Dolal experiments with growing crops in the arid village of Dertu, Kenya

The MVP's one dryland village paints a picture of hope. Dertu lies in Kenya's Northeastern Province, 140 kilometers from the Somali border and receives just 350mm of rain annually. The Project has proved that the same progress can be achieved in Dertu as in other Millennium Villagers, provided interventions such as healthcare and education are adapted to nomadic and semi-nomadic lifestyles.

One success story has been the introduction of drylands farming techniques, notably so-called multi-storey gardening, where crops are grown in sacks with drip irrigation. Farmers were trained and supplied with pesticides and seeds of high-value crops such as tomatoes, kale, spinach and water melon.

The venture has boosted incomes and with better nutrition, the people of Dertu, who as pastoralists consumed mainly milk and meat products, are no longer deficient in certain nutrients and they have something to fall back on in times of drought.



"People always used to think our land was unproductive but if we can produce things like this kale and these water-melons, then I think we can say goodbye to food insecurity"

Mourid Abdi Dolal, one of the farmers practising multi-storey gardening in Dertu

The message here is inspiring and a rapid assessment of ten households revealed that they were food secure for 12 months of the year. No cases of malnutrition in the under-fives were reported. A random sample of 50 households suggested that alternative livelihood options, such as drip-irrigation farming, are welcomed by 80% of pastoralists.

Other dryland sites have been selected, including Afdem in Ethiopia, Amibara in Somali and Afar regional states, and Eresaburu and Eldera in Kenya. In Uganda, Lotome and Lorengedwat sub-counties were chosen. Djibouti identified Khor Angar in the north and Daasbio in the south. A site in South Sudan, most likely in Eastern Equatoria, will be selected shortly, and negotiations continue with Somalia to bring them actively into the Program.

The MDG Centre has developed a series of training modules to replicate in these arid, nomadic settings the progress we have made towards all eight MDGs in the Millennium Villages.

In parallel, we will continue to work with governments to counter the historical neglect of pastoralists in national policies and budgets. The policy document on 'the future of pastoralism for the Horn of Africa' has been prepared for active debate at ministerial and parliamentary level. By acting both locally, in the community, and at regional scale, the Drylands Initiative has the chance to bring about lasting change for the pastoralists of East Africa.



SCALING UP

From village-wide to nationwide: Scaling up the model

A major component of the work of the MDG Centre is to advocate strongly for the implementation of an MDG focus in the national policies of African countries, and the Centre provides guidance and technical back-stopping to an increasing number of local and national governments who have adopted the Millennium Village approach. It is testimony to the success of the Project that more and more governments are coming on board, and lessons learnt from the villages are being scaled up, giving millions more the tools to lift themselves out of poverty.

Scaling up the Millennium Village model to district and country level is a key priority, not only to ensure more people benefit from achieving the MDGs, but also to facilitate local ownership of the villages beyond the 2015 deadline.

Unlike most development projects, the Millennium Villages were set up to work within a well-defined timeframe. After ten years of support from the MVP, the premise is that communities will be able to continue progress on their own, without further grants and subsidies. Therefore, the main priority over the next four years is to ensure that, after 2015 the Millennium Village communities, backed by their national and local governments, will be in a position to carry on the gains achieved during the Project lifespan. The MDG Centre will work with each host government to ensure a smooth handover of functions with this deadline in sight.

This process is already ongoing, and our collaboration with the Government of Rwanda is an encouraging example. Inspired by the dramatic transformations in Mayange Millennium Village, the Government invited the MDG Centre to provide input on its national poverty eradication strategy in 2007. This partnership was given a major boost in September this year, through a Memorandum of Understanding. With a renewed sense of urgency, the Government committed to combating poverty and achieving the Millennium Development Goals by supporting new initiatives in health, agriculture, education, infrastructure and business development.

The MOU adapts proven practices generated by the MVP, and sets out a strategy for collaboration on poverty reduction over the next three years.



"In Rwanda we appreciate the good example you have taken to own and support our socioeconomic programs towards national development and this has been witnessed by all Rwandans, especially by vulnerable people."

James Musoni, Rwandan Minister of Local Government, speaking in Kigali at the September 8 signing of the agreement with MVP founder Professor Jeffrey Sachs.

It builds on Rwanda's Vision 2020 Umurenge Program (VUP) which aims to accelerate poverty eradication, economic growth and social protection nationwide as part of the country's national Poverty Reduction Strategy.

Once implemented, the joint VUP and MDG Centre strategy is expected to positively impact an estimated four million Rwandans by 2014, and scale up MDG interventions to 416 administrative sectors.

Work continues on Kenya's "Millennium Districts", launched in 2006 by the Ministry of Planning. The MDG Centre is helping to formulate the scale up strategy in nine districts, closely following the Millennium Villages model, and provides training for local government officials. With support from the Government of Finland, the initiative's emphasis is on developing infrastructure, enhancing referral services to district health facilities, and boosting commercial activity. The MDG Centre has also been working closely with the African Union Commission (AUC) since 2009, to mainstream



MDG-focused policies throughout the continent as a whole. As part of the implementation of the MOU signed by the African Union (AU) and the Earth Institute in 2010, an AUC delegation visited Sauri Millennium Village in Kenya this year, and the MDG Centre is now working with the pan-African body on the 2012 MDG report. The publication will explore ways in which lessons learnt from the Millennium villages can be applied to achieve the MDGs in different African contexts, via policy change at the country level.



"The Millennium Villages Project, and Professor Sachs individually, had a huge effect in enabling Kenya to pursue a policy of mass distribution of bed nets and the shift to community-based treatment of malaria. The Millennium Villages Project informed our government about the efficacy of such policy breakthroughs. Professor Sachs's advocacy inside Kenya, with the Global Fund, and at the United Nations, helped not only Kenya, but all of Africa to make a breakthrough in malaria control. It is because of this important work and the lessons of the Millennium Villages that our women and our children have stopped dying from wholly preventable causes. Nobody should doubt the importance of the Millennium Villages in showing the way. It has worked, it has made a huge impact on Kenya."

Kenyan Minister of Water, and former Minister of Health (2003-2007) Charity Ngilu.

PROVEN STRATEGIES, NEW VILLAGES

Expanding the continental reach of the MDGs also means that we have launched Millennium Villages in several new regions and countries - on the island of Pemba in Zanzibar, and for the first time Mozambique and Zambia. We are thrilled to be able to apply the strategies developed in our initial sites to give more communities the capacity to eradicate extreme poverty.

The first Millennium Village in Konkola, Zambia was launched in August 2010, in partnership with the international mining company Vale. Following a baseline survey and needs assessment, the MDG Centre has supported start up activities, including discussions with local government, community members and mining sector representatives. With a population of roughly 5000, Konkola is the first Millennium Village to be located in a mining area, and the community relies on copper mining as their main source of income, in addition to subsistence farming. Over the coming years, the MDG Centre and Vale will focus on income generating activities, as well as interventions in health, education, and the environment.

In a similar venture, Vale will support a new Millennium Village in the Nampula Province of Mozambique. In April 2011, a team from the MDG Centre, the Earth Institute and the local implementing partner, Africare, conducted a joint visit to identify the Project site, looking to where interventions can have the greatest impact by helping the most impoverished communities. We aim to launch the Project in 2012.

In addition, the MDG Centre and the Earth Institute will begin to work on country-wide strategies to achieve the MDGs in Mozambique, following an agreement signed this year with the Ministry of Science and Technology.



The village on the island of Pemba, in Zanzibar, Tanzania, launched in January 2011, progresses from the MDG Centre's collaboration with the Tanzanian Government and our work in Mbola Millennium Village on the mainland. The MVP was honored in June this year by Tanzania's hosting of our annual retreat, bringing together field staff from Millennium Villages across Africa, delegates from the MDG Centre, the Earth Institute, Millennium Promise, as well as key partners in government, the UN and the private sector.

Pemba is the first Millennium Village located in a community where fishing is the main livelihood and numbers approximately 7600 people. Our focus over the next year will be to strengthen basic services like health and education, as well as boosting the community's income base through profitable schemes such as seaweed farming, in partnership with KPMG, the global tax and advisory firm.

In Chad and South Sudan, the MDG Centre Team has provided technical support and lessons learnt to new "Sustainable Villages" launched by the Islamic Development Bank (IDB), as part of a wider partnership agreement signed with the organization. The program is expected to enter its implementation phase in early 2012, and may be expanded to include additional countries.

Going forward, the MDG Centre will focus on developing the basic capacity and self-sufficiency of recently-launched Millennium Villages, as well as scaling up our partnerships with African governments, applying lessons learnt to achieve the MDGs as widely as possible. As funding from the MVP itself will be gradually withdrawn from the villages in the lead up to 2015, we will continue to work to strengthen government capacity and ownership of the Project, particularly of public services, and to ensure a smooth transition whilst maintaining gains made to date. Timetables for this process will be established with host governments and budgetary allocation made.

RESULT HIGHLIGHTS 2006 - 2010

East and Southern Africa

AGRICULTURE

GOAL: INCREASE FOOD PRODUCTION

- Average maize yields have doubled, and in some sites quadrupled, rising from 1.3 t/ha to 4.6 t/ha.
- Food insecurity has more than halved.

WATER AND SANITATION

GOAL: INCREASE ACCESS TO SAFER WATER AND ADEQUATE SANITATION

- Access to safe drinking water and sanitation has more than tripled.

HEALTH

GOAL: DECREASE RATES OF HIV/AIDS, TB AND MALARIA, AND IMPROVE MATERNAL AND CHILD HEALTH

- 39% of adults have been tested for HIV in the last 12 months, compared to only 11% prior to the start of the Project.
- Malaria prevalence has dropped by 80%.
- 50% of women deliver with skilled birth attendants, compared to 35% at baseline.
- Levels of chronic malnutrition in children under two have decreased by 1/3.
- Under five child mortality rates have fallen by 1/3.

EDUCATION

GOAL: INCREASE THE QUALITY OF EDUCATION AND ENSURE UNIVERSAL PRIMARY EDUCATION

- The number of students benefiting from school meals programs is now at 81%.
- Enrolment, attendance and grades have improved due to better facilities, equipment, and parent and teacher training.

GENDER EQUALITY

GOAL: IMPROVE GENDER EQUALITY AND EMPOWER WOMEN

- Girl's attendance at school has increased, and is equal to or greater than that of boys.
- The number of businesses run by women have increased, and with it their leadership role at household and community level.

BUSINESS DEVELOPMENT

GOAL: TRANSITION FROM SUBSISTENCE FARMING TO COMMERCIAL AGRICULTURE

- The number of cooperatives in high value products such as honey, dairy, and crafts is rising, along with the income base of communities.
- Access to loans and financial services is being expanded.

INFRASTRUCTURE AND INNOVATION

GOAL: INCREASE ACCESS TO ENERGY, TRANSPORT SERVICES AND ICT

- Five years ago, just 20% of households were within two kilometers of an electricity grid, a share that has now more than doubled.
- Mobile phone networks are now within two kilometers of 80% of households.

ENVIRONMENT

GOAL: ENSURE ENVIRONMENTAL SUSTAINABILITY

- More than 2.5 million seedlings have been produced.
- The erosion and nutrient depletion of soils has been improved via interventions such as composting and appropriate fertilizer use.



PARTNERSHIPS

Joining together
for progress

The eighth Millennium Development Goal commits the international community to build a partnership for development and the MDG Centre's various partners – private sector, NGO's and global bodies such as the United Nations – have contributed immensely to the gains we have made.



"The grain bank is currently empty because we signed a contract with WFP to buy our maize every year. It bought this year's consignment worth \$70,00 for feeding programs in Malawi's schools".

Baison Kasonga, Chairman, Mwandama Farmers and Marketing Cooperative



Prof. Dr. Klaus M. Leisinger watches a demonstration of ChildCount+ with Dr Hamadoun I. Touré, Secretary-General of the International Telecommunications Union (ITU) in Mayange, Rwanda

As we move ever closer to 2015, we are diversifying our partnership base to mainstream the Millennium Village model within global development approaches so that the benefits of achieving the MDGs can be shared by the greatest number of people possible.

The stronger the partnerships the MDG Centre builds in the second phase, the easier it will be to hand over the Millennium Villages to local communities and African governments so that gains made by the Project can be maintained well beyond 2015.

On October 3rd 2011, long term Millennium Village Project supporter George Soros, UN Secretary General Ban Ki-moon, and MVP founder Professor Jeffrey Sachs launched the second phase of the Project at a widely publicized event at the

United Nations in New York. International news headlines the following day heralded George Soros' \$47.4 million dollar funding commitment to the MVP. The funding will be partly in the form of grants for core operations, and partly in the form of loans from the Soros Economic Development Fund (SEDF) to support investment-worthy businesses in the villages over the next four years.

Our partnership with the SEDF will enable us to grow agribusiness cooperatives into successful, self-sufficient enterprises which will generate income to allow villagers to maintain development gains on their own. As part of our business focus, we are thrilled to have begun collaboration with the Cooperative Bank of Kenya, which will facilitate a portion of the SEDF loans to fledgling cooperatives, starting with Sauri, Kenya. We hope to begin loan distribution by early 2012 at the latest.

In addition, we engaged the Cooperative College of Kenya, the leading school of its kind in the region, as a partner. The MDG Centre commissioned a tailor-made training program at the College, the first in a series designed to equip cooperative managers with the necessary managerial skills to expand and improve cooperative operations.

Our partnership with the World Food Program (WFP) has continued to provide a guaranteed market for the surplus of staple crops produced by the grain banks in Sauri and Mwandama, Malawi.



JM Eagle CEO Mr. Walter Wang and Professor Jeffrey Sachs after laying the foundation stone in Ruhira, Uganda

The WFP also supports the school meals program, which now benefits 75% of children in Millennium Village schools.

In 2011, the MDG Centre continued to strengthen its collaboration with UN agencies to ensure broad-based national support and links to the global policy agenda. UN Secretary General Ban Ki-moon has continued to voice strong support for the MVP at the launch of the second phase of the Project, following his first visit to Mwandama, Malawi, in 2010.



"As we look toward 2015 and beyond, we can be tremendously optimistic. For one example of how we can advance the Millennium Development Goals in Sub-Saharan Africa, we need only look to the Millennium Village Project. At the Project in Mwandama, Malawi, I saw first-hand how an integrated, holistic approach to development can help entire communities lift themselves out of extreme poverty."

UN Secretary General Ban Ki-moon

Together with UNAIDS, we have continued to work on the elimination of mother-to-child HIV transmission notably by working to synchronize Millennium Village interventions with national and regional policies. A number of high-level visits by the UNAIDS team to draw on MVP best-practices took place in 2011, including the Sauri visit of the UNAIDS Board in November.

In the health sector, the Novartis Foundation for Sustainable Development donated 200,000 doses of antimalarials to the Project this year. During a visit to Mayange, Rwanda, Prof. Dr. Klaus M. Leisinger, President and MD of the Foundation, noted the near complete elimination of the disease, achieved in tandem with the spread of insecticide treated bednets.

The provision of critical infrastructure gained momentum in 2011 thanks to our private sector partners such as the international plastic pipe manufacturer JM Eagle, who has donated over 530 kilometers of pipes. JM Eagle CEO Mr. Walter Wang visited the Millennium Villages of Sauri and Mayange, as well as Ruhira in Uganda to witness the tremendous changes safe water has brought to people's lives.

The provision of eco-friendly electricity to households far from national energy grids is also a key component of MVP's infrastructure interventions, and one of our key partners in this goal in Tanzania has been Panasonic Corporation. In October, the company donated a solar power Life Innovation Container to Mbola Millennium Village, at a high profile event attended by the Japanese Ambassador, his Excellency Masaki Okada and Mr. Hidetoshi Osawa, the Executive Officer Director of Panasonic Corporation. The container, which can generate electricity for three days even without sunlight, will light up the lives of villagers by facilitating the social and economic gains needed to achieve the MDGs.



Mr. Hidetoshi Osawa, Executive Officer Director, Corporate Communications, Panasonic Corporation, handing-over the LIC in Mbola to Hon. Fatma Abubbakar Mwassa, Regional Commissioner for Tabora, Tanzania.

Virtual infrastructure, in the form of ICT connectivity which links once isolated communities to the rest of the world, plays an ever-greater role in innovative development solutions. For this reason, the MVP has partnered with private sector leaders in the mobile and web revolution, including members of the Broadband Commission for Digital Development.

80% of Millennium Village households are now within two kilometers of a mobile phone network thanks to connectivity provided by partners including Ericsson and Airtel.

Ericsson also supports the Connect To Learn initiative, facilitating greater access to secondary education through scholarships, alongside increased broadband connectivity in schools. Following a new agreement in November, Airtel will provide a number of SIM cards and mobile phones to the villages, with voice and data capacity, making life easier for everyone from community health workers to livestock breeders.

Our partnership with international fashion designer Tommy Hilfiger continues to inspire community artisans, particularly women's basket weaving groups in Mayange, and jewelry designers in Ruhira. We have increased production and improved quality to meet large-scale international orders, and Mayange's baskets will grace Hilfiger's store displays in 2012.

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To read the listed articles, please go to our website: www.mdgcentre.org

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(31 December 2011)

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ISSN 2077-5091

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Compiled and produced by The MDG Centre

Photographs by Millennium Promise, The MDG Centre and MVP staff

Published by Pouran Ghaffarpour, Publishing Section Ser. DTP Unit

Editing: Helen Vesperini; Graphic Design: Stefanie Freccia, design@stefaniefreccia.com



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