



# 2010 Africa-Middle East Regional Microcredit Summit

Session transcript

## Sustainable Environment: Using Microfinance and People's Own Initiatives to Propel Investment in Renewable Energy, Water and Sanitation

Day 2, 10:45 AM - 12: 15 PM, Lenana Hall

**Moderator:** Rose Wanjohi, CEO, Kenya ECLOF, Kenya

**Panelists:**

- Mr. Patrick Lumumba, East Africa Watercredit Program Officer, Water.org, Kenya.
- Mr. Ziad Al Refai, Executive Director, Jordan Micro Credit Company "Tamweelcom", Jordan.
- Mr. David Kuria, CEO, Ecotact Limited, Kenya.
- Kamim Islam, Director of Development, Grameen Trust, Bangladesh (on behalf of Mr. Absar Kamal, Managing Director, Grameen Shakti, Bangladesh)

**Rose Wanjohi:** We need to build partnerships. We need to do product innovation. We need to get into these areas of need because these are areas of need for the clients that we serve.

So, you are welcome to this session; I will introduce the panellists, they will be dealing with different aspects of the topic. But our focus area is identification of potential opportunities for microfinance institutions in renewable energy, water, and sanitation. The second area is identification of possible challenges that hinder MFIs from rolling out products in renewable energy, water and sanitation.

Number three: determining the roles and responsibilities of the various stakeholders in facilitating the successful delivery of renewable energy, water, and sanitation products. So, those are our focus areas, and we will also be having a little bit of personal testimony. As they start their presentations, we want to hear what they have been doing as individuals in this particular area, even before they do this presentation, because I believe that is what really makes a difference when you see somebody who has been involved in something. So we will go right ahead. We will have the four presentations, and then we will allow questions at the end of the workshop. I hope we are ok with that.

Our first presenter is Ziad. Ziad is the CEO of Jordan Microcredit Company, and he has 10 years MFI experience, he holds an MBA in microfinance. It's worth noting that he won the 2009 award of social entrepreneurship at the World Economic Forum. So we are happy to have him do the first presentation. Let's give him a hand.

**Ziad Al Refai:** Good morning. Thank you, Rose, for this lovely introduction. In the beginning, I will spend a minute or two minutes introducing Tamweelcom which is a microfinance institution in Jordan. Tamweelcom is an Arabic word, it is a direct translation of "your finance". Tamweelcom is a microfinance institution established in 1999 in Jordan serving the micro entrepreneurs and the low income people, the poor, and the "productive poor" in Jordan.

Jordan is in the Middle East, and our population is around six million two hundred thousand; the GDP per capita is around US \$4,000--\$5,000. Poverty is around 15% as you see in the map here. The penetration of the market is around 10% to 15%. Tamweelcom started in 2008 trying to, finding a way of building value chain service for the micro entrepreneurs and the productive poor through providing them with a comprehensive set of products that would make sure the poor would benefit, to expand their businesses, and generate more... [4:17-4:31 / unclear]

So, trying to make sure for the institution itself, that we are providing the full set of services plus that we are having the proper impact and following that we define our target market, we define the type of

services that we are providing to them starting from business training, financial services (in Jordan according to the regulatory framework and regulations just we are providing loans, not allowed to provide savings and other financial services), and provide another set of non-financial services such as marketing. This is the need according to the market surveys and the demand assessment surveys; for the market, this is their need. To make sure that we are having the right impact and change their financial, social, economic, environmental situation; this is the change that we trying to do in each term of our services.

In the beginning, you know, the microfinance has double bottom line: sustainability and social impact. During last two years, there have been added the environmental impact, which is a triple bottom line.

From that time, we started in Tamweelcom to think how we can serve the segment through providing environmental products that would help the micro entrepreneurs and the productive poor to access clean hot water or to use free energy resources in their daily life.

I will not go in depth with this, but this is what type of financial services and non-financial services that we are to our clients, the most important of which is providing a marketing gateway for the micro entrepreneurs to sell their product through a market or a shop called IADI so this something about Tamweelcom. This is a very brief introduction about Tamweelcom; directly I will go to our let's say part in the environment, let's say by offering our target market a set of products, as I said, that will enable them to use the energy of the sun.

This idea when we started it last year, it was in December 2008, when we decided that we should develop something that will help the poor and the micro entrepreneurs use the sun and the energy to improve the accessing to hot water at lower costs than usual. So we are partnered with a local manufacturer in Jordan that is producing such panels, and at start we got special discounts, special prices, because we are talking about quantities, and we started to promote this product to the poor in our areas using our network, our branches, our loan officers.

This product usually it is used for two things. Actually one, the solar panel using for heating water; this is one to heat the water for home use may be or for shops, micro entrepreneurs they could use hot water during their daily work. Plus using the hot water for the heating systems, this is let's say a different class or different segment of the market who could use these panels to generate water that could be used in the heating system, which will lead to reduce the usage of fuel, which is again for the environment.

The product process it is also towards as any product in the institution, it's like the individual loans, the group loans, there is a process where the micro entrepreneur or the productive poor fill an application, or visited by a loan officer, he will show interest that he would like to have this one product so the process takes usually from one day to 5 days, including installing the panel. Usually our other process launches from 24 hours to 48 hours disbursing the loan; we have a good infrastructure for Idiya Cell and Internet in Jordan so it could happen to disburse a loan within just 24 hours.

Actually my part is also to explain that we faced a lot of challenges actually, it is not an easy job for microfinance to do this part as environment but we discovered that we can do it. As a microfinance institution, we have direct contact with clients in poor areas. We could convince them, even we could play a role in awareness for those segments, but we [were] still in piloting when we did the piloting last year. It was in May and June that we started piloting when we faced a lot of challenges, that may are internal, related to the institution itself, or [it] may be external related to the client. I will just go through.

At the clients' level, we face the challenges that with our clients and our segment that we have awareness which is not there. In our targeted market they don't believe in using such because in Jordan, 99.9% of people in households have electricity wire. So electricity is there and everywhere. So the awareness itself is very important because they don't believe that they can save the globe and

save the earth if they use [solar] energy. So it's very easy for them to use the solar or the electric heater. That's it. So this is one of the challenges that we are working now to overcome with the government--to do awareness and to do campaigns, then which is the client electricity and gas [unclear] which is the easiest and lowest cost.

Another challenge that we face is that they don't have spaces in the roof. Or the house, they don't have pipes in some houses or in some poor areas and slums, they don't have pipes for hot water and cold water, they have only one pipe if there is. The installation process we face a lot of challenges that we overcome it.

The other challenges are product level, which is again product deficiency and two technologies which are traditional ones--pipes, solar panels, and the evacuated tubes. This is a technology that is much more efficient but that has a higher cost. Competition in the market which is I believe that competition is good for the good of the client let's say for the benefit of the client since he can now access or can be able to own [a] solar panel that would be used in the house.

One of the biggest challenges that we face which is an internal challenge and it is a controllable challenge is regarding the staff, the staff they used to promote intangible service, not selling a fixed asset, so the culture of the loan officer in the beginning we faced that he is used to sell loans not to sell something tangible as a fixed asset. So we invest later on, we invest a lot on doing training to them and it's very important we did in the beginning a very small training we thought that it is enough but then we discovered that we have to go in depth to explain to them how they can sell such products.

Technical skills: There are some technical words when you are dealing with a product like this you have to be aware of. This is just in brief to give you how we did it in Tamweelcom and we succeeded so far this is the second year for us in this product. We can do it and we can do anything that could provide the poor and the productive poor better life and better conditions. Thank you.

**Rose Wanjohi:** Thanks, Ziad Al Refai, we have heard experience in the Jordan microcredit company and how they are doing the solar panels and other things.

We will go to our second presenter, David. David Kuria, is the CEO of Ecotact Limited. Ecotact is a company we have here in Kenya, and its dealing with innovations in urban development and environment. He has 12 years experience in urban development, and he is an architect by profession. He holds an MBA in strategy, and again in Africa, David was the winner at the world economic forum for the social entrepreneurship award. That is in the year 2009, and he is also a member of the Global Agenda Council at the World Economic Forum. We are very proud of David, at least we have experience of his product, let's hear about it. David, you are welcome.

**David Kuria:** Thanks, Rose. Good morning. I will be telling you the story of a passion in what we call the eco toilet which we started around 12 years ago here in Kenya, and right now we are almost within the region, having signed in Tanzania and going to Uganda. And the passion purely lies on the challenges ahead in terms of urban development and the issues of increasing urban poverty, issues of housing, and especially in sub-Saharan Africa where we are having large global slums that are not serviced.

So there are several challenges that we wanted to address with this story of the eco toilet. With great inspiration from Mahatma Gandhi and *my* question especially when I address the crowd is purely knowing whether they are my clients. With a very simple question, whether you are users of a toilet. Anybody who is a user of a toilet? Do I have a client? Perfect.

Now, the opportunities that we are talking about, currently we are talking about nearly 3 billion people without access to sanitation globally. I think that's a major challenge when we are going to ICT—revolutionizing the whole world—yet 3 billion people have no access to sanitation. Very basic. They have to defecate in the open: some on the beaches and some in the urban areas. In Kenya, in some slums, they are using the flying toilets and other sorts of innovations.

So the biggest challenge is who is supposed to provide sanitation to the 3 billion people? Our focus really was what we call the “transformation basis,” and we looked at four key pillars of transformation that we wanted to make some change, not only to the toilet sector, but to the social or urban development sector including housing, including poverty, purely as an approach of addressing some of these urban challenges.

Sanitation, I think, was to us the most complex—looking at the issues of social necessity; education and health are very easy to provide. I think it’s purely an issue of money and a few campaigns. When you talk about sanitation, it’s a very private affair. It’s like sex; it’s not something we are going to discuss and debate and find a solution.

So there are issues that really we needed to transform. One is the urban landscape: What is the position of a toilet in our cities? Is it visible? Is it fair? And all you need is to take a tour across sub-Saharan cities.

Social transformation: What’s the position of toilets in our society? In some of our community in Kenya, they don’t even have a word for toilet. So, how does exist if you don’t even have a word for it?

Technology: I think we need to catch pace with technology and again with the growing water demand in our cities we need to look at really sustainable systems of sanitation, and finally, we need to ensure that it is sustainable. And that’s addressing the economic basis.

So, briefly, in terms of the urban transformation, what we have done is to make sanitation purely an urban monument. We want toilet monuments in our cities, that whether you are a visitor in Nairobi and any other city across the continent, the first thing you see is, what is this monument? And that is a toilet.

Number two is we need to make sanitation *sexy* and address it from different perspectives: from the comedian perspective, where we have engaged the top comedian in Kenya and we are now looking for the top comedian in Tanzania—purely for the sanitation marketing. We have engaged beauty pageants to start talking about the relationship between beauty and hygiene. We have used the churches—the religious leaders—is there any relationship between religion, Godliness, and hygiene?

Also the political theme. And I think that’s important. At the technology level, we are looking at exploring all options; from the UV water treatment especially in the slums, where there is potentially high water contamination, lessen rain lost to be able to conserve water, biogas from human waste used in biodigesters, and exploration on a complete dry toilet and the aspect of solar heating to make sure that the human feces or the human waste breaks down effectively.

We are now in the final and we are hoping in the next three months to release the first of the urine fertilizer here in Kenya after which we are waiting for the final approval by the government, before we release that. So we are looking at all issues of technological innovations that can help us transform, and again looking at all this, I think these are all businesses, whether you are talking about UV, the biogas--that’s purely a potential revenue.

When you look at economics, what we have done is to transform the toilet aspect into a toilet mall where you can get more than the two functions of the toilet. You can have your shoe polished, you can buy your airtime, you can blog your companies-corporate blogging and the recent one is you can also buy a coke, if not a banana, in the public toilet. I don’t think this is something that you can even do in Washington, but we are doing it here in Kenya.

The business sense: when you look at the sanitation sector, in its broadness, I think there are three segments that we are looking at. One is the waste collection and that is human, we are talking about the 3 billion people so if you are to do collection of human waste from the 3 billion people, I don’t know how many tracks you need, or how many containers you need to build. That’s potentially a big business.

Number two is the transportation from the user to where you need to treat it. Number three is the treatment itself. The amount of potential biogas that we can be able to generate by harvesting all the waste; the amount of fertilizer that we potentially can be able to get if all we did was collect human urine and convert it to fertilizer.

For us to be able to achieve this, there are key things that drive the change and to us it is really the issues of partnership for us to be able to ensure that in the next century, we will not be talking about 3 billion people without sanitation. We need government, it is critical; it is their basic mandate to provide sanitation. We need to provide a school for corporates, whether it is through corporate social responsibility, or corporate social investment.

We need the media, I think that is a key thing to highlight the innovations, but also the challenges faced with people without some of these services. And those are the people who are dying of cholera and diarrhoea and typhoid, water bond-related diseases. And we need the civil society, I think they are doing a wonderful job but then also we need the resources, and I think that is where the microfinance institution comes in. Who finances this driving change?

The media, I think, has played a key role especially in the growth of the eco toilet here in Kenya, and now that we are entering the Tanzanian market, I think the media locally and internationally I think has played a major major role really talking about the new phase of public toilets in the city, and everybody is cautious and saying if we are going to transform from where we were, then what is it that is new with the eco toilet? And we have even our vice president visiting the eco toilet and having a shoe brush or shoe shine, it is that popular.

Good, to conclude I think there are few things that come in mind in terms of how then do we harness the potential for this collaboration and I think it is purely looking at the potential for servicing the bottom of the pyramid and also doing the social good, and I think the key thing is how do we harness the private sector to deliver not just the private good, that is the household demand and the provider's good, that is purely the business perspective but also the wider public good and that is what we are trying to address within the eco toilet initiative. Thank You.

**Rose Wanjohi:** I think that is great. Have you ever thought of taking your breakfast? You know. Yeah, around these facilities. But it is happening; it is a transformation here, we were used to very dirty toilets, now we can have all that, and we are grateful for that innovation.

We go on to the third presenter. Our third presenter is Kamim Islam. He works for Grameen Trust, he is a Director of Development and he is also a Deputy General Manager, and he tells me that his role is to replicate the Grameen model around the world. And we want to hear how he does it in relation to this topic. Let us give him a clap.

**Kamim Islam:** Thank you so much, Madam Chairman. I just want to thank Miss Rose only because in the morning when we were setting up how the presentations would go, she just wanted to have a thematic movement, and it turned up really well. Ziad and David, and it is very hard to follow David because he was really funny, and I really don't have any jokes.

I am presenting on behalf of Mr. Absel Kamar, who is the Managing Director of Grameen Shakti. Grameen Shakti is the largest renewable energy company in the world. It is an organization of the Grameen systems networks, professional Yunus started Grameen Shakti. Why was Grameen Shakti started? Part of the thing is that, Ziad mentioned that in Jordan, 99% of the people have wired electricity.

In Bangladesh only 40% are wired, and if you actually go to Google right now, in Taka, and other parts of the country, we get electricity into our blocks. In my own home, I get about 6 hours of electricity in all day, it runs on generator. So, what rural people, we are 150 million people, if we can't really have a nation without power and energy, and one of the things is that to challenge this, we have come up with a mechanism where microfinance and renewable energy comes together to serve the rural poor.

Grameen Shakti started in 96, it works all over Bangladesh, I have actually a map somewhere. No, there is a nice map here. Yeah, it is all over Bangladesh, and what it does is that, it goes out to the rural poor trying to impress on them the value of the core, four core products that we have. We have solar energy, we also have biogas, we have organic fertilizer, and improved cooking stove. Only one of them is essentially an innovation, the solar panels, it's just rolled in.

But if you look at everything else, most microfinance borrowers already have cows and chickens, and other sanitary mechanisms where biogas plant gets its raw materials. Organic fertilizer is essentially a by-product of the biogas plant. Improved cooking stove is very important for Bangladesh because we do not have natural gas and other mechanisms to provide cooking so we have invented these cooking stoves that generate greater heat and use less wood.

In terms of the whole solar panel thing, is that it is very expensive, and to get to the poor, we have created a mechanism where they buy the solar panel on microfinance, and they pay back in instalments. It has a one year guarantee and a 25 year service contract. There are more than three hundred and fifty thousand solar panels installed in Bangladesh by Grameen Shakti. We have about eight thousand biogas plants, and forty five thousand improved stoves.

So it is pretty impressive, and the thing is that one way to impress on the people about the solar panel is that it is a business opportunity. You can use it to recharge mobile phones, you can use it to add longer hours to your stove in the evening, it is pretty much pace for itself, and this has created more popular in Bangladesh and has you know essentially helped us grow really fast.

This is something more important for a practitioner, it is like the various options that we have on selling the solar panels, so you can pay a fifty percent down payment on thirty six month instalments, twenty five percent on twenty four months, or you get a four percent discount on this. This is something that you can work out if you are in your locality. You can actually try to find out what kind of business opportunity the solar panels could generate for your clients. And you can move forward with that and this customized based on how fast the cash flow is. So it's something that could be something developed by yourself, based on your experience.

This is our growth trajectory, we have grown pretty fast and by 2010 we should have more than two hundred and twenty thousand panels installed in this year alone. The thing is that it gets momentum once it grows fast, and it is much easier in a densely populated country like Bangladesh but in a lot of places in Africa where population density is a challenge, this is something. The growth trajectory is for users but when you are looking at Africa, the Middle East it is something that you have to look at because it is much less densely populated, the biogas program I mentioned and we have more than nine thousand programs, and you see these are the things, improved cooking stoves, this is a biogas plant.

One of the things about biogas plants is that a lot of these plants generate sufficient gas, so that it is also a business opportunity for some of the home owners. They have pipes to neighbours and sell them gas and this is our biogas plant, essential plant, it is pretty fast moving. Improved cooking stoves, I mentioned this.

One thing is that a lot of those who are working with remarkable villagers, you've kind of seen this kind of structures, it covers up to keep the heat inside, and this is what we are doing moving forward, this is a Grameen Technology Centre, what we do is that we have trained more than three thousand women to make small parts, for solar panels, and lights, and connections so that we don't have to import them, and it's also a business opportunity for the women because these women end up being the service providers for the solar panels and the home electricity systems. So in a village you can actually have someone trained on a lot of things, and this is an employee of Grameen Shafti, but trained by us and she is the village technician.

It works out really well because a lot of times, women would actually more than welcome other women, to come at their homes and fix these things. And this is another new thing that we have, this

is solar panels for mobile base stations. These are high power base stations, because these are 6.5 Kilowatt base stations. We have four of these, Grameen phone is the first mobile company in Bangladesh and we have installed this in several of their base stations, so it reduces their dependency on diesel, and great electricity. And the challenge we had, the financial legal framework, mostly because and also the lack of involvement of financial institutions, one of the things is that we are so big because we have provided micro finance, other organizations do not actually do that and there is a more or less commercial money. Probably commercial money doesn't understand how the business works. I think that is story of microfinance all over the place anyway.

And increasing power efficiency and solar because solar is not very highly efficient, it's about 35% and road map on 2012, we are setting up more than a thousand branches in the next two years, more than a million solar home systems, biogas plants, we have won a lot of awards. Essentially that is it, thank you so much. Good on time?

It's beautiful to hear from different areas. Jordan, 99.9%, people with electricity. Their challenge is to have people stop using electricity and use solar panels. Then we go to Bangladesh, there is a different scenario, and the challenges are interesting to listen to.

**Rose Wanjohi:** Now we go to our fourth presenter. We are grateful Tamim for that presentation. It looks very big and you were wondering if you are just starting off, will you ever reach where Grameen is, but you are building hope in us. Thank you so much for coming all the way.

Patrick is our last presenter. Patrick has been a practitioner and a consultant in the microfinance field. I know him when he worked for MES, and right now the East African Water Credit Program Officer, working for water.org. He has 12 years experience in MFI work, holds an MBA in marketing, and his role today is to come and help us see how we can build these partnerships with MFIs, for those who are not in MFIs, and the challenges that are therein, and possibly some solutions to the problems that are there, as we build those partnerships. Let's give a clap to Patrick.

**Patrick:** Yeah, Good morning everyone. It's a privilege to give this presentation. The advantage of being the last person in giving presentations, is that you give a summary and you go and sit down. Yeah, these are investment opportunities for microfinance institutions, in renewable energy, water and sanitation. With eight minutes, I think I will rush through the slides. Hopefully that you will be able to read through as I go.

Briefly, on Water.Org, is that it's a non-profit organization, started in 1990, based in Kansas City. Previously it was known as Water's Partners International but currently it's called water.org. Very active in South Asia, East West Africa and Central America more on a grant activities in those particular areas. Water credit, an interesting model that has actually brought us around, use enables households community to gain access to credit, began in 2004 and it has operations in Bangladesh, India, Kenya and hopefully we intend to upscale in greater parts of Africa.

Briefly on renewable energy, I think my two colleagues have covered it adequately but it is energy which comes from natural resources--sunlight, wind, rain, tides, geothermal heat, and from world health international statistics, in 2006, 18% of global final energy consumption came from biomass, hydroelectric, wind, solar and bio fuels covered for 2.4%. So, this is a very little percentage taking into consideration that 100% known as it's there. Microcredit water sanitation is an innovative application of microcredit or microfinance tool, to enable people access clean water and sanitation products. A few of some of the works and products that are being implemented worldwide are toilet septic tanks and latrines , this is more on sanitation, water connection, water harvesting packages, we are talking about tanks, water access financing we are talking about pumps, sprinklers, and that kind of thing.

Then, SME loans for Watson implemented by KREP Group with the support of World Bank and the support of CBOs, to implement large scale CBO, water borehole products. Then there are a lot of water value addition products and in this sense we are talking about irrigation as a result of gaining

access to water, we are talking about fish rearing as a result of getting access to water. This is something that we have experienced most in Central Province it is becoming a more and more lucrative product. So those are the types of water credit products potentially for MFIs.

Opportunities in renewable energy water and sanitation, globally over 850 of entrepreneurs are in need of finance, Sigap statistics. In most developing countries, over 50% of the population do not have access to finance. In Kenya these statistics currently stand at 32%. As from the FSD statistics, previously it was at 38%, so it is quite a huge percentage of people who don't have access to any form of finance. Then 900 million people do not have access to clean water, again these statistics were 1.1 billion. Recently, over 2.6 billion people do not have access to proper sanitation. These are huge, huge opportunities for microfinance intervention.

Still on opportunities for MFIs and the gaps that are there. As of today, we are told that 130 million people in developing countries face severe water shortages and poor sanitation. Potential demand is to the tune of 12 billion water and sanitation, but mostly sanitation for rural areas. This is from Eges foundation research. There are also people, or clients or initiatives that MFIs need to tap on to. We know that our clients demand for water products, as financial institutions, but we are limited in terms of giving them this. We will discuss about the limitations. Then there is also people's creativity, we have heard about David Kuria's creativity in terms of getting eco toilets. Then we have groups SAGs and CBOs that come together to do renewable energy activities, water and sanitation activities, these are the people we need to partner with.

Then of course, the government initiatives. There is an MFI in Kenya called Cisgo that began its operation from a government initiative, irrigation initiative. So there are several government water sanitation and renewable energy activities that MFIs can tap into.

Opportunities still for MFIs, we find that MFIs, we focus so much on direct income revenue for activities but there are opportunities if proper interventions are done in water and renewable energy whereby we could save our clients from incurring a lot of direct expenditures, from going to look for water for long distances, medical expenses, so these are direct income revenue that could help our clients in terms of saving.

Then the opportunities to retain our clients by giving them a more diversified range of products, then there are also opportunities in terms of up scaling of existing successful donor initiatives. There are several donor initiatives that go untapped. These activities do not have sustainability strategies; MFIs have very good sustainability strategies when they partner with donor projects. Then more importantly, it facilitates clients to own assets, and to improve the quality of life.

In most missions of MFIs, you find that there are a lot of statements indicating: changing life, improving life, creating wealth but do we actually improve the quality of life or is our focus still on income generation? We are told water is life, sanitation is dignity, renewable energy is the future.

Going to the challenges, some of which we I know, we are well aware of. There is a lack of specific renewable energy water and sanitation credit product services. This is something that we have experienced, we have gone through, we have done a market assessment for Kenya and Uganda through partnership with Microsil and it is something we noted in most financial institutions both banks, MFIs and SACCOs. There are no clear renewable energy, water and sanitation products. So you can't implement a credit initiative in this area if you don't have a specific product for that.

Of course as has been said, there is lack of expertise in this area. There is also a perceived risk, repeat *perceived* risk associated with this sector of products. There are also MFIs as I have indicated are used to analyzing or appraising entrepreneurs based on direct income. Looking at the appraisal forms, how much is the business making, how much is it going to leave behind to repay the loans, but in renewable energy, water and sanitation loan products, there is a lot of indirect income generation.

Again, the other challenge is before sales, logistics, and after sales issues, we find that in terms of implementing that product that those challenges, of course inadequate perception in the public that

this sector of products is government role, lack of support conduct market development, MFI regulatory frameworks are also inhibiting. Then also tracking these products could be a challenge, because of social products, we don't have a lot of that in most MFI MISs.

Possible solutions, assistance to develop appropriate products, partnership with manufacturing [missing audio], integration of research and product development in our activities as microfinance institution, establishing of special projects departments. I have seen this in K-rep Bank whereby they handle donor driven projects or products and they also have KDA, K-rep Development Agency, which does piloting in these projects before determining its sustainability and rolling it out to the bank. Partnership with collaboration will address lack of expertise, then perceived risk there is need to develop MIS specific risk management frameworks, logistics challenges I think this could be done if partnerships are well structured, well thought out, inadequate capital of course convincing lenders, banks, and other partners of the sustainability of this product and it is also an opportunity for philanthropic partners, to facilitate or capacitate MFIs.

As we all know most MFIs began as donor driven projects, what are we doing as water.org? We are partnering with MFIs and banks, we are giving them much subsidies of capacity building so that they develop products, train their staff, do market assessment, and in that regard we are also creating secondary spinoff.

Some of the products like the toilet products sanitation products we see are in India, in our projects in India. There is a water point and a sanitation facility and the small one standing before is an incomplete toilet construction. This goes for around 6,000 rupees, something less than probably around 0.7 dollars or rather 900 dollars. Thank you so much.

**Rose Wanjohi:** Thank You, Patrick, we are going to go into Q &A session, Questions and Answers session. If you have a specific question for the presenters, address it to the particular person for the next twenty minutes. And what we will do is that she will give you a microphone, would request you to stand so that there is order in the room. So let's get going, we will take the first three questions and have them answered, and then we will continue from there.

**Q1:** Mine is very simple. Will we be able to get the power point presentations?

**A:** It is actually foreseen that they are going to be online in a couple of weeks.

**Q2:** Mine is a question to Patrick, the last presenter. About the water harvesting, what are you doing about water harvesting because you talked about water harvesting but I haven't seen anything about water harvesting in your presentation.

**Q3:** First, I want to appreciate all the presenters in the African way. [lalalalala] Thank You so much. My questions now. First to Ziad, you didn't tell us how many of the systems have been installed in Jordan so far. The other question is to Islam. Have you tried solar cookers? My name is Margaret Owino, I am the regional director for Solar Cookers International here in Kenya. Thank You.

**Q4:** I have a general question for the panel. My name is Joyce and I work for a company called Base Technology, and we sell simple solar products, lighting systems, and we are partnering with MFIs, but one of the thing that we are finding challenging is that they are very risk averse. So we build micro franchises--it's one of our distribution models and the question is in your experience of partnering with those MFIs, how have you overcome that risk aversion to partner with them?

**Q5:** Can I ask one more question? My name is [inaudible], am actually a colleague of Joyce, Base technology in Uganda. I would like to ask the gentleman from Grameen Shakti if you've ever considered much smaller systems? Our systems prices start from about 20 dollars which actually addresses the cash market and then up from there microloans start to be interesting, but the micro loans are so interesting for the entrepreneurs who purchase larger quantities of small products. Thank You.

## *Answers*

**Rose:** Hello, let's have Patrick answer his question, and then we will move on.

**Patrick:** Thank You so much. Water harvesting product, I think it is the most common water credit product, at least in Kenya and Uganda, as general market assessment, that is water findings came up with. And the more consistent way that MFIs have been doing is that partnering with junk manufacturers, whereby a client seeks for such a loan, applies and the MFI mobilizes or consolidates such applications, presents them to the tank manufacturer, who in turn distributes such tanks to the clients, and the MFI then pays the manufacturing company, but the name is registered under the client's name. So it's the most prevalent water credit product.

Challenges have been in terms of logistics, because you find that the distributors or the manufacturers sometimes come and bring the tanks at the MFI branch offices so we find that a branch office has been turned into a store whereby there are several tanks which have not been collected. Those are some of the challenges that as I indicated, that need to be sorted out logistically. And the after sales issues that arise because the tank either has broken down or is damaged, the client claims that she can't use it yet it is performing. So, the days after sale services that MFIs need to address in partnership with the manufacturers. Thank You.

**Kamim Islam:** Thank You for the welcome. Just to answer the questions. We do not have any solar cookers installed in Bangladesh. But if there is a demand, it's something we are willing to look into mostly because we are work with our buyers and also our clients to see what demand they have and try to find a solution, so if there is a demand probably if the demand is not we could have one or two installations, because what we have done is that we have solar pumps for irrigation.

So, one or two installations that someone sees, and thinks is that it could be popular we could look into it, but we do not have any solar cookers installed right now . With regards to having smaller solar panels, essentially turning our clients as resellers. We have the Grameen Technology Centres where women do resell smaller units especially the LEDs, the connectors, all sorts of things that essentially are making gadgets. So definitely we have the infrastructure and the channel. So potentially demand is there. *We should look into other things as well.* Thank You so much.

[54:56 - 56:10 / audio missing]

Maybe if I shout, then you can...the question about...solar panels...piloting phase...still having same piloting phase...sold around 150 units. ...challenges in the piloting phase...mechanisms...the same time question about the risk averse, if you could just clarify about what type of risk because we are all the time facing risk in microfinance. This is our life. [56:58]

## **Other room**

[57:09 - 1:00:26 / audio missing]

Hi, my name is Ashley. I just had a question to address solar. You guys all talked about solar energy as renewable energy, but as Tamim mentioned, it's actually pretty inefficient at 35%. It's also expensive. So why are we not challenging that, and have you looked at other ways of creating energy without using solar—without relying on solar? [1:00:46 - 1:00:48 / inaudible] Primarily, but anyone can speak to it. [1:00:51 – 1:01:08 / inaudible]

We have fourteen minutes.

**[panellist]:** Ok. Now for the eco toilet construction, I think, in terms of the investment, the infrastructure cost is about \$20,000 per unit, and primarily what we have done is pure debt investment. So we have taken a debt to invest on sanitation, we have three different models; two have been piloted: one is in the preliminary studies (that is in the urban and the slum areas). It came here in Nairobi and in all of them we have evolved a business plan which is coming to five years to ten years

for a complete cost recovery. So, there is really no subsidy in that. And then in terms of the user pay, we have developed two products now. One, all the eco toilets in urban areas, we charge 5 Kenya shillings per use; now in the slums we are charging 1.22 US dollars per month per family, irrespective of the family number so they get a mega card that they can use irrespective of the frequency of use and that is purely to promote 100% access in the slum area. So that is how the package is working.

Thank you so much.

**Shakti?** [unclear]: We do import our solar panels, it is source from various places, from Europe and China so whoever gives us a better price. We are trying to figure out how to make them in Bangladesh but the technology is expensive. The infrastructure cost is also very expensive. So, we are trying to figure out that is it more cost efficient for us to import it or to manufacture it. It is a pretty challenging.

Why solar? If there were anything else better, we would go for it. We are 150 million people; this is a lot of people in a very small country. Even in the cities we do not have the power; we are a severely power shorted country. Just go into Google, in Google news, in “power needs electricity in Taka”, you will find out that we have nothing. So, this is something that is better than nothing. This is something that we can do; it’s readily usable. You can just put it up, wire the house turn it to switch on and it is there. In terms of wiring in Bangladesh the rural electrification board has thousands and thousands of kilometres of wires. It’s pretty much, I would say, 75% of Bangladeshi villagers have a wire running through their homes; not all these wires that carry power. It’s just potentially for show; I shouldn’t say that, but you know... If anyone here is from Bangladesh government, I am sorry but that is a fact.

Just to say that the solar, this is an issue if you are going to rural village and this is the only panel you have. You have the batteries. You have the wires. You turn it on. It just works; that is why we have opted for it. If there were better options, we can work others. Definitely in terms of scale, we can scale it much faster than anyone else because we have the infrastructure there. We have staff—5,000 of them—right there. We have the rural offices; we have specific offices, buildings, cooking stoves installing solar panels. So the thing is, if there is something that is available, we have potential game for it, but we need to figure out also the cost for the poor as well.

**Ziad Al Refai:** If you allow me, just to add on this. Actually I think while we are using the solar panels and providing services in such countries like Jordan where we have 99.9% of electricity and the power everywhere. Actually, this is another part that we should cover, that we are heading to resource the funds of the government or reach channels instead of subsidizing the fuel and for providing electricity for everybody that we can use cheap or lower cost sources that will benefit us and the government to re-channel the money to something else. This is one.

Second, I think, I believe and we all believe that micro finance institutions are the best in providing the services to the bottom of the pyramid. So, if we are talking about something that we want to do awareness for, that we want to spread it out, I think microfinance and their distribution channels, and their distribution services infrastructure, they are the best to do that. So this is why we believe that this is one of our goals as a micro finance and that’s in the rural and we can do a lot in providing such service. Thank You.

**Rose Wanjohi:** The whole issue of profiling your client groups, there are those who will do with the economical there are those who for the renewable energy and some who want money to do electricity connection and all that. So the whole profiling and understanding what the need is very, very important.

And asking yourself, “Why am I targeting the particular group that I am targeting?” So, we will have that whole chain. Can I take one more question, Barbara? Ok. We will take the last lot of questions, because we need to fill our evaluation forms. And Barbara will be explaining that in a short while, so

let's take the last questions, and then we leave it there, we go into the evaluation forms, and there will be some three announcements that we need to make before you leave. [1:07:25 – 1:09:04 / no speaking/ inaudible]

**Q6:** *[translated from French]* I come from Congo Kinshasa, and I am a Mayor of a town. First, I thank all the presenters of today because at a certain point, there is little hope. They gave me hope in so far as this morning's presentations try to give me some answers. What has been said about sanitation, with toilets, it is an experience that we underwent in a town, when I inaugurated a toilet which rather looked like a restaurant, the people laughed, they were wondering why for urine and feces, such installation is made? Therefore, somehow, I think that to change the peoples' habits, we need to sensitize them with adapted means and updated means. So, all this equipment, it is for everyone to know that a town's cleanliness is a concern. Therefore, I thank the person who talked about this urban sanitation and I am so happy and encouraged.

Concerning what Mr Lumumba presented about water: It gave me a little answer too, but I would like to give an invitation. When you say that you are in Africa, that you are almost everywhere, you forget the area where I come from. Therefore, we have not yet seen such experience yet the rural population is waiting to be given solutions to be able to access drinking water. So, it is an invitation that I send if your company is ready to help us in our town in the Cong we could as well meet an abundant population which needs crucial solutions for families.

The exploitation, when it comes to mineral companies, they are almost everywhere in Africa, but in our place, we do not have plenty and I think for a province of a million inhabitants, we do not have them at all in the province where I come from. That is why I say that they are alternatives, they are opportunities, and this should be able to help families be able to access credit. Therefore, at my place, many companies come; they come to exploit diamonds, they get rich, they leave, and the population is still poor. While companies would come and help the bottom people get financing, but only we do not see them. That is why I praise those who already have done a lot in order to change people's life; it is also a privilege, a possibility to collaborate with NGOs, organizations that do something for the people, ought to come. Thank You.

*Moi je viens du Congo Kinshasa et je suis maire d'une ville. Je remercie d'abord les présentateurs de la journée parce qu'à un moment donné, il y a un petit espoir. Ils m'ont donné l'espoir dans la mesure où les présentations de ce matin, essayent de me donner quelques réponses. Ce qui a été dit concernant la sanitation, avec les WC, c'est une expérience que nous avons traitée dans une ville, lorsque j'ai fait l'inauguration d'un WC public qui ressemblait plutôt à un restaurant, les populations elles rigolaient elles disaient, « Ah ! Pour les urines, pour les selles, on fait une installation pareille? » Donc, quelque part, je pense que pour changer les habitudes la population, il faut les sensibiliser avec les moyens adaptés et les moyens du moment. Donc tout cet équipement, c'est pour que tout le monde sache que l'assainissement d'une grande ville, c'est une préoccupation. Donc je remercie la personne qui a parlé de cette sanitation au niveau des villes et je suis très content et je suis très encouragé.*

*Pour ce qu'a présenté Monsieur Lumumba, concernant l'eau. Aussi ça m'a donné une petite réponse mais je voudrais donner une invitation. Lorsque vous parlez qu'on est en Afrique, on est un peu partout, on oublie beaucoup le coin dans lequel je viens. Donc, on n'a pas encore vu ce genre d'expérience alors que la population aussi au niveau rural attend qu'on lui donne des solutions pour pouvoir avoir de l'eau potable. Donc c'est une invitation que je lance si votre société est prête à pouvoir nous aider dans notre ville au milieu du Congo, nous pourrions aussi rencontrer une population abondante qui a besoin d'avoir des solutions hauteur d'échelle à des familles.*

*L'exploitation, lorsque les sociétés minières, elles sont un peu partout en Afrique mais chez nous, nous n'en avons pas beaucoup, et je pense pour une province d'un million d'habitants, nous n'en avons pas dans la province d'où je viens. C'est pour ça que je dis ce sont des alternatives, ce sont des opportunités, ça devait être en mesure d'aider des familles à pouvoir avoir des crédits. Donc chez moi, beaucoup de sociétés viennent, elles viennent exploiter les diamants, elles s'enrichissent, elles*

*partent et la population est toujours pauvre. Tandis que les sociétés ou des institutions qui viendraient pour aider la petite population à avoir des financements, seulement on les voit pas. Voilà pourquoi je dis bravo à ceux qui font déjà beaucoup de choses pour pouvoir changer la vie de la population, et c'est aussi un privilège, c'est une possibilité de venir collaborer avec les ONG, les organisations qui font quelque chose pour la population, qu'ils puissent venir. Merci.*

**Rose Wanjohi:** Thank you for the appeal for more MFIs to go to the Congo, and for more people to go and take these innovative products to the Congo. That was the gist of the comment.

What we will do now is, I will give the microphone to David, I don't know; David, did you follow the conversation? Yeah. So, David will respond to her concern about the eco toilet. She is saying that they tried to do that but it didn't work and then the other one was a comment on Lumumba and then we close, because we need to close on time. We only have four minutes left. Thank You.

**David:** Thanks, I think I mentioned in my presentations, that when it comes to the issues of sanitation, I think it's really a very confidential affair. It's not a public issue. It's also very private. So she talks about really taboo in the parts where I come from. Now when you are focusing, I think the perception and that's what we came out from the word go, is that if you go to the slums of Nairobi you will be shocked how many Nokia phones are there and we are still saying they can't afford water, they can't afford sanitation. And almost every household in the slum is having a Nokia phone. So, to me it's an issue of status, it's an issue of dignity. So when you are talking about water and sanitation and the dignity part of it, it's not for the poor. I think the quality of water we are taking is purely standard, whether you are rich or whether you are poor. And need the same thing apply to sanitation.

So, to us, the eco toilet we are putting in the middle of the city near our Parliament building perhaps for the use by the Honourables, is the same facility we are putting in the slums of Nairobi. The same quality, the same standard, because to us the standard for shitting is the same whether you are rich or poor. So, to me the approach in terms of marketing is purely more emotional than functional. The function remains standard. So, it's purely an emotional issue, and that's why we have attracted a beauty aspect of it by bringing the beauty pageants, the comedian, the top musician purely to make this more of a comedy issue, a more attractive issue for us to be able to talk about it. Now, we are extending that to school, and I hope our government will allow us to revolutionize in the school sector how we approach in terms of sending the right messages for water and sanitation in a purely very sexy way without provoking the sex debate.

Ok thank you so much. I didn't get my gadget in good time, but from what she was telling me is that the Congolese lady is welcoming water.org to Congo because they don't have access to water and it's good that I have very senior persons around so they are listening if they have something to talk about.

Still on comment on market strategies, our operation in India has very interesting campaigns for the sanitation where it has worked extremely well. In fact, sanitation products are doing very very well in that part of the world where the campaign strategy is what David is talking about, schools and children. It's very easy, it's very effective using the kids to send the message home and more particularly also women because it's also an emotional strategy whereby women within the household do not want their daughters to go out at night or early in the morning to help themselves on the road because of security issues and that kind of thing. So, it's more of an emotional issue and using children and schools has been very very effective for that part of the world. Thank you.