

CONVERSATION: EMPOWERING YOUTH LEADERS AND ENTREPRENEURS
IN AGRICULTURAL ENGAGEMENT AND INNOVATION

October 12, 2011 - 3:30 p.m.

Rick Little- CEO, ImagineNations

Greetings, everyone. That was too quiet. Greetings, everyone. Thank you very much. We're going to have a lively and provocative conversation. This is billed as a conversation, so it's an opportunity for us to talk with each other and amongst ourselves here as well, to learn from each other.

I was provoked a little bit by Howard Buffett. He's quite an amazing man. He's one of those rare people who has the gift of matching the head, the analysis, the analytics, with the heart and the human condition.

And this session builds so beautifully on what Howard said at one point in his remarks - that we don't need another Green Revolution. We need a new way of thinking. That's about the future. That's what this session is about - young people, how to engage young people, how to engage young entrepreneurs in this broad industry of agriculture across the value chain as innovators and agents of change - the future.

I would like to start about engaging you, so if you could take ten seconds - just turn to the person on your left or right, introduce yourself. Sometimes you come to these meetings and it's hard to meet people. Just introduce yourselves one to the other.

Thank you very much. I always like to just start at the beginning with an opportunity for you to know who's sitting next to you. We often go to meetings such as this and conferences and different places, and we only meet in the margins, on the margins - in a reception for these brief snippets. I hope that the person you just met is someone that perhaps you might follow up with later as we continue.

How many of you are parents? Look around. How many of you are grandparents? Do we have some great-grandparents in this room. Yeah, a couple.

We have gathered here - I'm struck by the diversity. We were talking outside that 75 nations represented here - many, many languages and cultures and backgrounds, different parts of the world, different ways, different lenses through which we see the world.

We have so much diversity here as people and as sectors: those from the public sector at various levels - international institutions, national institutions, local public sector institutions; we have NGOs and grass roots organizations on the front lines working with young people; we

have educators; we have researchers and scientists; we have scholars, we have scholars and former farmers. We have multinational corporations. Everyone looks through his or her own lens.

I remember when globalization was first becoming coined as a phrase, and I was in the Philippines at a meeting of entrepreneurs and investors. They asked a Filipino, "How do you see globalization?"

And he thought, and he said, "Well, I think it depends on where you sit on the globe," which was Howard's point. It's all about context; it's all about the lens through which we look.

I grew up in a small farming town in Ohio – 800 people, one stoplight, and everybody was a farmer. And over the last 35 years I've spent my life trying to help improve the conditions and prospects for young people around the world.

I have had the privilege to travel to over 130 countries and have spent lots of times on lots of farms, small and large, across Africa and Asia and the Middle East, Europe, Latin America. And if there's anything I take away from it, it's for a long, long time we've been talking about a lot of the same issues and the same challenges.

Yes, there's been great progress made. Yes, there's been significant innovation. Yes, there has been change and improvement. But I think I would share Howard's view that, being an optimistic pessimistic or a pessimistic optimistic, or as Nelson Mandela so aptly called it, he said when asked, "Why are you so optimistic about the future of this fractured country?"

He said, "You know, I'm not really an optimist. I'm a prisoner of hope." I like that.

People have been talking about partnerships for a very long time – public/private, civil society – and yet if you look around the world, despite significant agreement that it takes all sectors working together, there are really relatively few examples of sustainable, scalable partnerships where all parties come together and work together for change. Despite all the rhetoric and talk about partnership, there's been a lot of talk for a long time about access, access to markets, access to financial products and services.

And yet the banking sector where I'm living in the Middle East, a tiny fraction of the loans and financial products and services ever filter down to micro-small, medium-sized enterprises in the value chain.

We've been talking a lot about these issues for a long time, which tees me up for my first question to this illustrious group of people who are on the frontlines. All of them are creators and innovators and social entrepreneurs and educators in their own rights, all with distinguished backgrounds which you can read about.

So I would like to open and begin with the end in mind. So rather than work up to the end, I would like to open with a question. And we can start with you, José, and you can introduce yourself, and Eric, and so we'll just work down the line.

But I'd like to tee up the same question for all of you, beginning with the end in mind. If you could start this session by planting a flag; if you want this group to remember, to take away one key point, it might be a learning, it might be an opportunity that you see, it might be an obstacle, whatever that one flag is that you want to plant at the outset, what would it be? Take a couple of minutes.

José Zaglul- President, EARTH University

Well, it's a great pleasure to be here. I represent an institution that's called EARTH University. I am not young, but I work with young people.

You know, it's very simple what we want to do – we want to change the world, three words. And we were set up about 25 years ago in the mid-80s when there was war in Central America and the Cold War was not over. As a matter of fact, I just saw Peter McPherson. I know he's a great support of this event, and Peter was the administrator of USAID. And thanks to him, we got the first funds to create this institution that's called EARTH University.

And we said we wanted to do things different if we could start from zero. How can we influence the future through the people that come to our university, the young people, the young men and women that come to EARTH?

And we're focused on reducing that gap, I mean, preventing poverty, promoting peace, democracy. We wanted to make sure that we are not degrading the environment. And we decided first of all to define a mission, if I can, if this works.

Rick Little

Why don't we come back to this where you can do this?

José Zaglul

Okay. Well, I wanted to show the mission of the institution, which is right there. It's very important that you look at the words – it's to prepare leaders. Although we are focused on agriculture, we didn't even use the word of "agriculture" in the mission. It's "To prepare leaders with ethics, with ethical values, to contribute to sustainable development and construct a prosperous and just society."

And we base our education in four pillars. Each one is as important as the other. And in everything we do we incorporate the social and environmental responsibility. In every course, in the buildings, in the relationship with our community, with the people around us, with the farmers, with ourselves.

Second, it's very important that they have the technical and scientific skills. And obviously that's what universities do. And we have the best faculty. And later I will explain what is an integrated and participatory and experiential way of learning.

And then we decided that if we wanted really to have a sexy institution, you know, if we wanted to attract these young people, and people have referred to it, how do we make it sexy?

Well, people that want to study agriculture want to be successful when they go out. And we want them to go out and create wealth – it is true – economic wealth, but we want them also to do it not in business as usual but doing it in that social and environmental way.

And we have a program that I can describe later of how they have to form a company while they are in college.

And finally we have a set of values and ethics that we want to instill in all of them if we want to make this change.

And finally, if we want to change and if we want to reach out to people that are deserving but don't have the resources, we in academia are buyers because we choose people that perform the best on exams, and probably not the best people that can come to our universities.

So I will show you later how we go to the most remote areas of Latin America and Africa and try to identify those young people who probably would have never had a chance to go to college and bring them, give them a first-class education and form them as leaders to change the world.

Rick Little

Eric is from Rwanda – why don't you plant a flag.

Eric Pohlman- Senior Partner/Rwanda Country Director/Co-founder, One Acre Fund

Sure. Thank you very much. It's quite a pleasure and an honor to be here with this all-star cast of people out in the field doing good work to make the world a better place.

One of the first questions that I think is on the brochure is about the challenges that the next generation is going to face. And I have to plant a flag here at the beginning of this. I think it's important to look at a trend in the world that we are becoming more interdependent. Every day my actions affect you more quickly.

The policies of one government – what one government legislates will affect a farmer on the other side of the world; that a company will roll out a product, and that not only impacts the consumer, but it also impacts the environment around that consumer, it impacts the social fabric of our communities.

This interdependence will require a new kind of leader. This is a leader who, the best example I can think of right now are the social entrepreneurs that you might see in the room. This is a leader who doesn't believe that sustainable agriculture, that environmental stewardship, that profits, that a positive social impact are mutually exclusive. This sort of leader wants all of them. They want a single bottom line, then they want to add a second bottom line; they want to add a third bottom line and keep going.

These are the sort of leaders we need to be looking for, we need to be building, we need to be encouraging. The questions that I hope we get to today are – how do we prepare them? How do we send more students to EARTH University to get that vision, that voice? And then what can

our organizations, our companies, our governments do to embrace these new leaders? How can we add second and third bottom lines to the work that we do?

Rick Little

Thank you, thank you. Rikin joins us from India. What's your flag?

Rikin Gandhi- CEO Digital Green

Sure. Thanks again for having me on this panel. I work for an organization called Digital Green in which we are trying to bring together technology – in our case, information technology – together with social organizations to amplify the effectiveness of existing agricultural extension systems.

And I guess our real flag [goal] is to try to see that agriculture becomes not an option of last resort, which it is for so many farmers and so many youth, but really a vocation of choice that people see as something that they can achieve their aspirations for what they want to achieve for their lives and their families as well.

And what we're trying to see is how we can bring together technology to bring together communities of youth who, as in anyplace whether here in the states or out in India or in Africa, what source of dynamics youth are using today to kind of come together.

Peer pressure and communities' source of efforts have always been formative in terms of how people come together. But now, of course, there are tools of technology, like Facebook and YouTube, which youth in this country – right? – are so used to using to be able to empower themselves to connect with one another and to learn and to engage with issues related to whatever their interests might be, agriculture or otherwise.

And that's really what we're trying to see: how we might be able to use videos, videos that we train members of the community to create, which are by farmers, for farmers and of farmers - to be able to share and exchange best practices with one another, and to build ladders of achievements within these communities, some of which may be economically driven and monetary based and some of which may be nonmonetary based and which may be able to take out some of these more emotional or more social elements which are so critical in getting people to be enthusiastic about anything.

And that's really where we see sort of this opportunity to bring together some of these leaders that Eric was mentioning before - developing these change-makers, change-makers of social entrepreneurs who don't necessarily need to be people from the outside coming in but really individuals from within these communities who can serve as intermediaries and who are involved in creating and sharing sort of this content and providing resources to one another and developing businesses and enterprises of their own to sustain these processes for the long term and to drive others to be inspired by the progress that they are making.

Rick Little

Thank you very much, Rikin, and we'll circle back on each of these. I want to move to Millicent, who joins us from West Africa, or western part of Kenya (pardon me), and it's with this special

organization many of you know, 4-K, which is part of the global 4-H network around the world. Millicent.

Millicent Akinyi Obare- Youth Leader, 4-H Kenya

Thank you, Rick. I want to appreciate the fact that I'm a part of this panel. And I am a primary school teacher. I work with little children from the ages of three to fifteen years. And I believe that the youth are an asset. They are leaders that are solving problems in their communities today.

I also believe that issues that affect the youth affect the community. And for this reason, I took it upon myself to get up these children together and teach them skills that could help them solve their immediate problems. And this we did through the 4-K Club.

And out of this I realized, from what they are able to do and from their interventions, the problems they're undertaking and that are taking care of their lives today, that the youth can be an agricultural force that we need today to establish food security and to help young people thrive economically. Because these are young children who have been able to support and sustain a school feeding program.

Through the 4-H organization, which we call 4-K in Kenya, these children are able to look at agriculture in a different way, to look at agriculture positively. And through agriculture they have been able to improve their lives.

I have come to realize that, because agriculture is not part of the curriculum in education, we have taken it and used it in our clubs. And I realized that if we invest in agriculture, maybe through clubs or through organizations like the 4-H, then we can give the youth a beginning whereby they can look at agriculture positively as a career. Because in most cases as we look at curriculum as a teacher, most curriculums in Africa do not embrace agriculture at an early age.

And that is why at some level we find that the youth don't look at agriculture as a way that could help them earn a living as a career, as something that could help them maybe move to a certain status in life.

So when we started this thing at that early age, we realized that there is a big change in attitude towards agriculture in these young children.

And therefore we look at agriculture today in this part of Africa, in Kenya, as one way of even addressing the Millennium Development Goals, because I work in a part where extreme poverty and hunger is something that can be talked about feely because it's something that we see - it glares at us in the face.

But coming together through this organization, we have been able to embrace agriculture and look at it positively in a very different way. And therefore I want to say that the youth can solve their problems in their communities through agriculture today if it is brought down to their level at that young age.

Rick Little

So, Millicent, just to pick up right on that point – you talk about seeing young people starting early, and, and it builds on your point of building ladders and seeing them as agents of change and instilling a new sense of hope as part of the agricultural value chain through 4-K and other things. What are the big obstacles that get in the way, either policy or mindset, whatever it is – what are the obstacles that make that difficult?

Millicent Akinyi Obare

One of the obstacles could be that, as adults we want to tailor the way that we want things done. We don't give them space. Because, you see, what the youth want is for us to trust them. They want us to have faith in them. They want us to believe in them, believe that they can do it. And I experimented this, and I found out that these children are able to actually run their projects.

So the problem comes when adults feel that this is the way we want things done. This is the way we want it done. But youth need space. They need our trust. They need us to have faith in them and see what they can do. They have a potential inside that needs to be let go. But because we feel that this is how we were doing it, this is how we've done it, and this is how we want you to do it, then it's like we've lost that potential in them, and therefore they feel they cannot embrace agriculture and everything that goes with it the way we want.

Rick Little

So there's a mindset shift that has to happen.

Millicent Akinyi Obare

Yes.

Rick Little

José.

José Zaglul

I want to pick up on what she's saying that is so important. We are located in an 8,000-acre property, and we have all the way from - We're in the middle of nowhere in the middle of the rain forest. We have a primary rain forest all the way to intensive cropping.

And when we go and look for the students, let's say – we have students from 27 countries. How would they know about us? How would they know about a university that can offer an opportunity for them? They can't. Sometimes they don't have Internet; sometimes they don't have the academic background. So we decided to go out and look for them.

We go to the most remote areas in Latin America and Africa, and we go to rural higher schools. And the challenges are two: How do we bring them and give them a first-class education if they don't have the resources? And, second, how do we make up for the academic weaknesses? Because, you know, they're going to compete with kids from urban sectors – they will always be left out.

But what you're saying – if we motivate them, put the emphasis in learning rather than teaching, because we all learn at different speeds and levels. So if we put the emphasis on the learning process – and that's really our worry, not how to finish the class – and we have a ratio of one faculty member per ten students, and we have seen kids that have come to our university that were very weak academically.

But if you provide them, if you empower them, if you give them the motivation and if you give them the tools and have peer groups - that's another thing that we do – we have peer groups that maybe the ones that are good in science and chemistry will help the kids that are more rural, and the kids from the rural area will help the others in the field.

We also promote dialogue and respect and unity amongst different cultures. But we also create that sense of supporting each other. And it's amazing how, after a year and a half - and, you know, our faculty is a hundred percent dedicated to students, so any student can come to the faculty office and ask a question and the faculty is there to support.

But we have seen that kids that came to what we call our remedial program, that we bring them sometimes two months before we start school, they become stars. They become great professionals. Not only that, that's the hope of their family, is the first kid that has graduated from his family or sometimes from his community.

And when you provide that kind of hope, you are giving hope not only to that kid but also to the family. And he goes back to the community, and he creates opportunities. And I am very proud to say that 86 percent of our kids go back home, which is a high turnout. And 23 percent of the graduates have created their own businesses.

And they all do social and environmental work, which is very important, as you were saying. We don't measure success for how much wealth they make but how much good they give. And I think we have to change that settled mind of ours - of our consumption mentality that development has been based only on material and capital goods.

And I think if we don't include the social part - how good we do to others and how good we do to the environment - it's not going to be sustainable. And believe me, if you do good, it's good business too. You will realize – and I can show you with a specific example – that doing good is also good business.

So I very much believe that life is about opportunities, and more than half of the world doesn't have opportunities. And what are we doing to give opportunities? And that's the question that we have to ask ourselves.

Rick Little

Eric, that picks up directly to the point you made about single bottom line, double, triple and those other metrics. Talk about that a little bit.

Eric Pohlman

Sure. Well, thinking also about kind of the obstacles that we face, I can briefly introduce a little bit of the work that we do and some things that I've learned that I think might be pertinent to the audience here.

One is looking at a farmer in Sub-Saharan Africa or wherever he might be as a beneficiary versus looking at a farmer as a client and how much that might change one's mentality. And maybe somewhere in the middle is probably the best way to approach a small-scale farmer.

I'll give an example of some of the work that One Acre Fund is doing in Kenya and in Rwanda and Burundi. We serve farmers by offering a comprehensive package. And I was really touched by some of the things that Mr. Buffett said this morning about tailoring the intervention to the farmer.

And when you think about it, a beneficiary is sort of uniform, whereas a client is an individual. And there's a real power when you approach the problems that way. So the package that we've started is a comprehensive package that provides extension services. A field officer gets out into that farmer's field and trains that farmer. We provide input delivery for seeds and fertilizer. We provide these services on credit, and we do some market facilitation to help that farmer better market their product.

And it started small. [One Acre] It was a very entrepreneurial program that began with 38 farmers in Kenya in 2006. And we have since seen the growth to 75,000 families today and are continuing to grow at a rapid rate. And I share that, because I think it's important to start thinking about not just a purely beneficiary or purely social or even purely environmental or purely agricultural.

This interdependence in the world requires our leaders, requires youth to be thinking about the cross-section of all of that.

Rick Little

So many organizations, public and private, have metrics and gauges that we use around the financial and economics...

Eric Pohlman

Absolutely.

Rick Little

Across the value chain. And many have environmental and sustainability related metrics and gauges. Talk about the human condition piece of it. Where does that fit? Obviously they're all interconnected, but speak to that.

Eric Pohlman

Yeah, it's very easy to measure finance. I mean, it's black and white. You can see at the end of the day if you've spent more money than you've made. There's increasing pressure on environment and measuring that.

In terms of impact, or social impact, you can look at indicators on what sort of income has your product generated for somebody else. You're starting to look outside of yourselves. You don't think about necessarily what that is internally to the organization, but what is the benefit, the dollar income, the yield increase for all the clients that we've served might be one metric to start looking at.

Rick Little

Rikin, and you spoke about ladders of achievement and linked it to technology. And how would you speak into this conversation?

Rikin Gandhi

Sure. You know, I think a lot of us who have traveled out to the fields go out and often like to meet up with youth at schools. And many of us probably have asked the question, "How many in this classroom want to be farmers?" And it varies, to go with Eric's point, depending on the location.

In places like in South India outside of the technology hub of Bangalore, in one of the places where we work, if you go to youth and speak to classes there, the aspirations are of wanting to be engineers, doctors. None of the students typically would even think about mentioning possibilities of farming or agriculture.

But then you go to another place, if you go to a more interior or a tribal part of the country and you ask the same question to another group of students, you'll find that many of them will say that they want to be better farmers. And the same sort of sentiments are echoed often by their parents. So essentially whatever you hear from these youth, you're often hearing similar sorts of inspection from their parents.

And one of the main obstacles I think that we often are sort of confronted by is the confidence barrier that exists amongst the communities that we work with themselves.

Because of the sort of complexities of agriculture that have already been discussed in terms of weather and markets and externalities that are just so many and that are often out of the hands of you as the farmer, there's often this sort of hopelessness often amongst the communities that we work with – hopelessness in themselves and their own abilities, hopelessness in the fact that perhaps over years of interventions that government agencies, development agencies, private sector agencies have tried to provide some support but have provided mixed or negative sort of returns, have left them also in a state of feeling of disillusionment with those interventions.

And perhaps even some degree of hopelessness and even some higher types of faith that they might place in something like a god as being perhaps the only sort of source of why they continue to be in this vocation and just really trying to make their ends meet.

And to go to the point about metrics, one additional metric other than the traditional sort of cost benefit efficiency or efficacy type of gains, I think that we're also trying to strive to better try to understand is this notion of self-efficacy and how you can measure self-efficacy transformations over the course of time as people are progressively perhaps taking up new innovations or trying

them out and experimenting with these new practices or technologies for themselves, seeing some incremental types of changes in perhaps livelihood.

But perhaps more importantly, developing this larger curiosity to learn and to believe in themselves that they can learn, that they can apply new ideas and contribute their own ideas in this whole process of innovation and see that it results in gains both for themselves as well as for their families.

And through the field of behavioral economics, right, which is increasingly showing itself, I think we're starting to expand ourselves beyond sort of the pure fiscal types of quantitative evaluations of how these interventions are resulting in returns on investment.

Rick Little

So to all of you, I have just a play off of this, and keep it at this level for a moment, and then we'll go down to your specific work.

If you look at what we just discussed – these triple bottom lines, education that's values based, science based, entrepreneurial based, the empowerment of seeing young people and children as problem-solvers, not problems to be solved, etc. – as we think about that, and you talk about different obstacles, I'm curious. If you look at the ag value chain at the high level, if you look at that chain, field to fork, there are choke points. There are points of leverage where you can, if you influence in such a way the right person, policy, company, deal, investment, you can change the deal, you can change the scope, you could change the impact.

And I'm wondering, would anybody want to speak to where could you best influence, or where have you found the best points of leverage and influence on the value chain to accomplish the kinds of things you're talking about?

José Zaglul

I'll give an example of what happened to us. When we started about 22 years ago, we had 300 hectares planted to bananas. And, you know, each banana bunch has this plastic around the bunch. We produced 500,000 boxes per year. And then when you take what we call the banana hands out of the bunch, what is left is the center part of the bunch and the plastic. And this used plastic used to be thrown in the rivers.

The center part of the bunch absorbs a lot of oxygen, so it affects the aquatic life. And when we got our property, and all over in the Atlantic side, not only in Costa Rica, all over, the rivers were full of plastic, blue – they were blue rivers of plastic – and then it will go to the ocean.

So we went to the companies, and we told them, "Let's get rid of the plastic. Let's see what we do with the plastic or the banana waste."

And they say, "Are you a Communist?" I was young and beautiful then...

And I said, "Listen, we are affecting the rivers. We are contaminating."

And they said, "That's the cost of doing business."

So we decided to do something about it. And to make a long story short, because we don't have time, we changed this into waste baskets. You can turn this into a product. There is a big recycling company that recycles all the blue bags.

The center part of the bunch now is turned to banana paper. I have cards made out of banana, and probably I'm the only guy here that gives a card that you can eat. The company that makes banana paper belongs to one of our graduates.

But let me tell you, the company has changed. And now, because we are only 300 hectares, but now all the major companies are turning the waste not only into paper but into fertilizer. They are transforming the plastic. And, you know, it's not that they didn't want to, but they didn't think it was worth it.

And what we showed is that, if you really make a special effort, you can transform a waste, turn it into a commercial product, and it's good business for you and good business for the environment. And at the same time you are not affecting the communities around you.

So by affecting that specific part of the production chain, even the same companies sent us a note one day, the ones that influenced, the most influence that we had in them in changing their practices.

So this is just an example that, by making an extra effort, by looking at the environmental and trying to be zero waste, you can do good business and good for the environment.

Rick Little

That's a great example. Somebody else want to speak into this?

Eric Pohlman

Sure. On looking at the whole ag value chain and what are some of the touch points, what are some of the areas that we can invest more in, coming off of Mr. Buffett's comments this morning about the need for further investment in soil and the importance of tailoring interventions to that farmer's need, I think delivery is a really difficult challenge.

How do you get not only seed and inputs out to the hundreds of millions of farmers in Africa when rural infrastructure isn't there? How do you get them to use that properly? How do you educate people on the importance of soil fertility?

So delivering not only of physical goods but also information, education, training, all of those things, are going to be a big challenge when you look at agriculture. But it is surmountable.

On the flip side of that challenge is an insatiable thirst for all of those things. When you go out to talk to any farmer, I guarantee you, you say, "I'd like to enroll you in some training. Would you be interested in learning more about how to do farming? Would you be interested in purchasing seed or fertilizer if that was available down the road?" There isn't a farmer in the world who won't say, "Yes, absolutely. Sign me up. I want that."

So there's some sort of disconnect. There's a disconnect if we're scratching our heads here in this room, thinking, "Well, how do we deliver it? How do we get it out there? How do we pay for that? How do we finance that? How do we deliver?"

And then on the other side, everyone's like, "Well, when is anybody going to deliver these - the education and the inputs that we need?"

Rick Little

And so how do you bridge that divide?

Eric Pohlman

You just try, you experiment, and you try. I mean, you just get out and you start putting things together - this idea of young leadership that are thinking outside the box that are trying new things. This isn't to say that people haven't tried extensively in the past, but it's more pressing than ever.

And I'm certain that there are a number of EARTH University graduates that have ideas about it. And there are a number of people coming out of the 4-H Clubs in Kenya that have ideas about it. People are posting videos up on Digital Green that have ideas about it. I know the field officers that work with One Acre Fund have great ideas about it. They're out there - we just need to keep opening the door to them.

Jose Zaglul

In the previous talk, they talked about the waste. And, you know, being a commercial operation at the University, we also can teach the student to become entrepreneurs in that area. But we have also been able to turn the manure, the waste of animals into methane gas that can be used for energy sources.

And, you know, methane is at least 21 times more contaminating than CO₂. With two cows you can produce enough methane for four hours of fire, and you can even harvest the waste, if you want, in the field.

This has become a business for some of our graduates who are installing bio-digesters. We have a guy in Colombia that used to be a driver and came to EARTH - now he's a professional. And people are using the methane to produce CO₂, burn it, I mean burn the methane into CO₂. But it's a company that is providing solutions in energy to a lot of small farmers. It decontaminates the environment.

But again the things that we can do are not rocket science, and in Costa Rica we have installed 3,000 bio-digesters in the areas around us. And people don't know that wood for energy contributes to 40 percent of the deforestation in Central America. Now, if you can use waste material for energy instead - and we not only did that, but we are using human waste, and we have a big bio-digester in our property, and we supply 25 percent of the gas that's used in the cafeteria. So there are immense opportunities for being sustainable, productive and socially responsible.

Rick Little

[Opportunities] that are practical and that see youth as part of the solution and that provide ladders. Go ahead.

Rikin Gandhi

I was just going to say that I think, in terms of the complexity of these agricultural systems, obviously I think that there is work that's required within each component of these elements like research or extension or private sector development or community development types of interventions; but I think there's also this opportunity, as we've been discussing, about really trying to bring focus to the links themselves, about facilitating these connections between these entities and not assuming that these, the components themselves are going to somehow be able to arrive at some consensus or drive these connections.

So, for example, we've started trying to see how we can bring together more closely in a practical way research and extension with these communities that we're working with. [For example], we're working with the International Rice Research Institute and trying to take some of the research that they've been developing through their various knowledge banks, seeing how that can be facilitated and localized and socialized within the context of an actual farming community. They could use the research that's been developed at an institutional level and also be able to capture the feedback that arrives as this information is shared with these communities, including questions or issues or other innovations that the farmers themselves may be able to contribute.

And then be able to establish a two-way dialogue between these entities so that it's not just a one-way street from research to extension to the communities but really also is able to inform the research agendas themselves, based on sort of the issues, the innovations, the experiences that these communities are having.

And seeing how all of these interactions can also be shared and packaged in ways that engage other members of the public or youth who might otherwise be disengaged from agriculture.

So, for example, in India, as I mentioned, there's this huge migration from rural areas to urban areas. And as people are emigrating to these urban areas, they are often increasingly disconnected from the agricultural sort of basis of production, just as we might be here in the U.S. Just as in the U.S., these youth are increasingly using connected platforms on the Internet, like Facebook and YouTube that people in connected places, especially youth, are akin to use and to connect with one another.

And so what we are trying to do is to actually develop a Facebook game, which we have deployed and which you can check out, similar to a farmville or a cityville, which we've called Wonder Village. It essentially tries to connect these youth amongst this growing middle class in India with the issues of rural development, which they're increasingly starting to have some influence over in terms of policy.

And so to the extent that you're able to establish these links in media and in formats that are engaging to the respective types of youth or community members that you're trying to engage, while facilitating these links so that these youth in urban areas can connect with their peers in rural areas, learn about the types of decisions and issues that one another are having to deal

with, as well as the lives that they're living, so that they can really be socially as well as emotionally connected with one another to do so. I think this is where the role of really trying to establish these links across various elements from research to extension to various communities of individuals amongst the youth is so critical.

Millicent Akinyi Obare

You know, what excites me most is that youth, from what we are hearing, are able to identify a problem and find ways to solve that problem. Like I said initially, what they need is space. Because what we hear from the examples here is that youths identify a problem.

You see, like we had a problem where sustaining our feed program had to use firewood. And people don't come and say, "Now, what are you going to do about the environment? Because for you to use firewood, you know what it means."

And they came up with a program. They said, "Fine, then we are bringing up a tree nursery." And in bringing up the tree nursery, they would sell their tree seedlings to the community. So in a way, economically they engaged themselves and they solved an environmental issue.

So what I'm saying here is that youth actually can be future leaders in agriculture if given an opportunity.

Rick Little

And to pick up on that exact point.. (and I have been flagged on time, so I want to be sensitive and mindful to make sure we're out roughly on time.)...to pick up exactly on this point, that so many people still all over the world talk about and refer to young people as the future - they are the present, they are with us, they are farmers today, and they are part of the ecosystem today, tomorrow and generations to come.

In our remaining time (and I sure wish we had more because you guys have so much practical knowledge and experience to offer, and I wish that we had time to really have dialogue), what questions are we missing here? What's not in this conversation that should be in this conversation? And I already see ten hands of people who know what that is.

What I would encourage you to do as we try to wrap up on time is, follow up. If there are questions that we've missed here due to the lack of time, follow up. These folks have so much experience.

I want to want to walk right down the aisle then with you, José. Since we started with you, we'll start down here, and Millicent. If you could leave this group, you choose the sector - you could talk to them as a group, you could talk to the multinationals, you could talk to the investors or the NGOs or the governments or the donors, however you'd like to play it - if you had one challenge or one irresistible proposition that you would like to put forward, what would it be?

Millicent Akinyi Obare

Thank you. I think I want to say that the young people today can be and are potential entrepreneurs. And they are very, very innovative in their production methods and in all they are able to do. They have a great potential. And I would implore you to invest in them, because they have a lot to give if given the space and time.

What they need in us is to be caring adults, because when we reach out to them, they will show us what they have. I do believe in youth. And therefore if we invest in organizations that really do care about youth, then I'm sure we will have a better world - not just tomorrow, but starting today, as we can see.

Rick Little

Thank you very much. Rikin, put an irresistible proposition out here. Choose how you want to frame it.

Rikin Gandhi

So I think, you know, through their discussions we've come to some degree of understanding that I think we're moving from. Definitely there's still a lot of technology development that's going on, and that's very exciting, but at the same time there's this feeling that the seeds, the fertilizers, these inputs and the existing knowledge could in itself be able to provide some significant improvements in productivity.

And so I think the real focus today is really on, in terms of knowledge, of knowledge exchange and dialogue with these communities and especially with youth.

And I think one of the things I would say is that, besides knowledge in terms of its technical dimensions about the appropriate use of this technology or practices, I'd say that we should also be able to put a greater emphasis on the motivational element - how people engage with this technical information and how to use these things - so that they're able to really develop their human capital in a more sustainable way that's not just a sort of one-time adoption of a new practice or a new technology but something that really gets internalized, that people feel as part of themselves being able to grow and to see agriculture as a vocation of choice.

I think it's exciting to hear that a lot of development agencies are now thinking about human capital as a kind of critical component of their portfolio and are really trying to see how we can drive more of the social processes and bring together communities that drive this motivational element about making information as well as technology long-lasting and impactful.

Eric Pohlman

Thinking about this idea that 50 years from now the world's going to be a lot more interdependent than it is currently - and for some reason youth get that. Youth get that a lot quicker. The young people that Millicent is working with in Kenya see that, all right, burning wood is an issue. We can't burn down the whole forest; we should do something about that, so we're going to plant a new forest.

I don't know why it is. I don't know why youth understand that more than perhaps our whole culture does. Perhaps we as adults understand a little bit less.

So I guess my challenge for the room, for people here, is to think about a colleague that you have, maybe young or old. Think about a colleague that has challenged the status quo in your institution, a colleague that has raised his hand and said, "You know, what's the impact going to be on the environment?" or has raised his hand and said, "Why are we treating people just like beneficiaries? Maybe there's some value into actually selling them things that they want."

And maybe have a conversation with that colleague and set up a meeting right now or tomorrow or the next week. But there are these ideas burbling up. Fifty years or now it will seem silly to only chase after profits. It'll sound silly to only spend money. It'll seem silly to stand in a tree and only scream about the environment.

It's going to require us to do all of them - and the leaders of the future are going to do all of them.

Rick Little

José.

José Zaglul

Well, as my colleagues just said, I have a tremendous faith in the youth and also that education is the greatest tool we have for change.

I come from a country that abolished the army sixty years ago, and it has made a huge difference when you compare it to other countries in the same area. We invested in education and health, and we made education free and compulsory, and that has made a big change.

And I think the greatest challenge is - How do we educate those young people? For us at EARTH, giving them a first-class education requires a lot of resources.

But I'm also amazed by the response that foundations, companies, individuals that believe in our mission... Just recently, MasterCard Foundation did a partnership with us to sponsor 40 students per year for the next three years. The cost of the student is \$35,000 per year, fully. And some of them, 30 percent would be from Africa and the rest from Latin America.

So that gives me hope in humanity in the way that we look at things. And there's probably more good amongst us, but we like to bring back the bad things usually. And if we look at the good things in us, if we trust the youth and give them the right values, the right tools, if we build bridges instead of walls, the world will be different. And I think that's what we should do - educate, build bridges, and love each other.

Rick Little

You four are amazing, and your individual stories, and what you're doing in your own respective countries and beyond. I really do hope that you take the time to get to know these four people. I'll just conclude with two thoughts.

Peter Goldmark, a dear friend who used to be president of the Rockefeller Foundation, was the first person to introduce me to the idea of an irresistible proposition, and I'd like you just to think about this.

He told me the story that in 1980 less than or fewer than 20 percent of the world's children under five had been vaccinated or immunized against the five deadly diseases. And a group of people got together from UNICEF and the World Health Organization and USAID and Rockefeller and others. They came together, and they said, "What is our irresistible proposition?" and "We aren't going to leave here until we have one related to immunization.

And they set a target. They set a concrete metric and set up a system for how they deliver against it, that within a decade they would move from less than 20 percent coverage to 80 percent coverage. And they did it in a decade.

What is your irresistible proposition? What is all of our irresistible proposition? This discussion about young people isn't just a nice social do-good thing because it feels good. It's real. They're the present; they're the future.

So I close with this wonderful quote that I learned a long time ago from Eric Hoffer, who said that, "In times of change..." (You'll have to listen carefully to the nuance.) "In times of change the learners inherit the earth while the learned find themselves beautifully equipped to deal with the world that no longer exists."

Are you a learner or a learned? Let's be learners together. Thank you very much.