Ruth K. Oniang'o Africa Can Feed the World What Will It Take?

President, Director, other heads of the university who are here, the Latsis Foundation and family of the big Latsis family, ladies and gentlemen,

"Bonjour!" – "Jambo!" We say jambo in Swahili in Kenya. I'm just bringing you Africa. You saw the rain? You saw the rain as you came? For us, when it rains, it's good luck; if it rains on your wedding day, the marriage will succeed. If it rains when you are being buried, you are an honourable person, so I didn't feel bad as I arrived here in the rain. We had hoped to bring you sunshine from Nairobi as we came, but I just saw a little bit of sun yesterday and then it disappeared.

I just want to say thank you for this honour. I have come with my daughter, Lulu, my last born; she is here. To tell you the truth, when I got this invitation, I didn't attend to it immediately; I thought it was a hoax. Now I am here, I feel extremely privileged. I guess I don't even know more than most people; I just bring Africa to you. I'd like to congratulate the Laureates. When I listened to them it was as if they should be receiving the Nobel Laureate: they should be receiving the Nobel Prize, you know. Really. It's really great that you can honour them.

As I was getting ready to come, I started to look up this 'Latsis'; you know, what's this Latsis? Imagine that I had never heard of it! Then a friend of mine asked me what I was going to Geneva for. I told her that I was going to speak at the Latsis Foundation event and she asked me: "Who is Latsis?" So just before I left, she sent me this. She's based in the U.S. She got this from the website, what was said about John S. Latsis, the patriarch of the family: "Never a man to forget his roots and guided by a strong social conscience, John S. Latsis spent much of the latter half of his long life providing financial and practical support to hundreds of individuals and organisations." When I had dinner with the family yesterday, I could just see the grandfather in the grandson, who is also John S. Latsis, ... Can you clap? (*Applause*) They are the reason why we are here, so I decided I would start with that before I go forward. The other thing is, I was afraid initially that we might not get a woman Laureate and then she came. I had just written some words down—Nadine, I'm sure you'll be happy—that 80% of the world's food is produced by family farmers; 80% of these are women. This is FAO data. About 72% of farms worldwide are less than one hectare, while just 6% are larger than five hectares. When we talk of farms, we are talking of fisheries, livestock, forests and so on. That's what I thought I should start with.

I would also like to thank all of you who have come; I don't know why you are here – you must be here for a reason: first of all to celebrate the Laureates, but as I passed here yesterday, I saw my name out there and I kept wondering: Who will step into this room? What will bring them here? Maybe curiosity. Some have a connection, I realise, quite a number have a connection to the African continent; some are doing a lot of work in Africa and many will have decided just to come and listen. Whoever you are, whatever brought you here, please feel free, be welcome. In Africa we laugh all the time, by the way; even when we have problems, we are just laughing. We welcome you; even when we have no food, we give you what *we* were supposed to eat, you know, and that's who we are. (*Applause*) When I talk to people, I just tell them to come back home to the Mother Continent. We all came from there; we went away and left it empty. We took a lot from there and, at the end of the day, a reality check means that we are coming back home. You will find yourself back home if you haven't already set foot on that continent. So how many people have not set foot on the African continent? How many? Hands up. There are few, very few here. How many of you have never googled Africa? Never. Yes, you see, many of you have already connected with that continent. Don't even worry about the title; don't worry about that title at all. I'll just talk to you like a grandmother: I'm a grandmother who loves talking and if you go out with just one thing, I'll be happy. Are we together? Just relax. Okay. (*Laughter*)

So, that's Africa; that's a map. I haven't given you the tribal map—so many tribes and different languages, and we are 54 countries. Look at that: natural resources. That's what people were looking for in the past. As people were traded-the slave trade-the trading was also in all the natural resources. That's the map. Can Africa feed itself? Yes, it can and it will. I may not still be alive, by the way, when it does. Maybe I'll be looking down from heaven, or up from the ground; I'm sure it will be happening. Just at a glance, just to remind you, even if you know about it-I'm sure you can google and get all these facts-it is three times the size of Europe, unbelievable, the whole continent. But, of course, you know many people talk about it as if it is one country. Fifty-four sovereign states; it's not 52. The latest one is South Sudan, which already, no sooner it had become independent, is already having problems. Home to over one billion people and two billion by 2050. As Africa produces, Europe is not producing. Isn't it true? You people are not producing. You have to be given incentives to produce, but Africa is producing big time. Before, our children used to die before they were five years old: my mother lost six children to malaria, and now many are dying, but many are surviving. 25% of the arable land is there; 30% of the world's known mineral reserves are in Africa; 10% of oil, 8% of world gas resources are in Africa. (These are just figures: probably more, probably less. The fastestgrowing population is on that continent; imagine, it is and also six of the fastest-growing economies of the world. And if you ask Africans themselves, they tell you "which economy is growing"?

I speak to you, I talk about what I've gone through; I'll make reference to some of the issues I've come across and where I'm connected directly. One organisation that I'm the chair of Sasakawa Africa Association... I just wear many scarves so I keep making reference to them... In 1984/85 one million Ethiopians died; one million! The NGOs were sending messages out but nobody was listening; nobody was focused on Africa and the children were dying until a six-minute clip appeared on the BBC by the late photo journalist Mohamed Amin. He was Kenyan; he lost his arm during an Ethiopian insurgency and he died in an Ethiopian Airlines craft which was hijacked to the Comoros. Then Ryoichi Sasakawa, sitting in Japan saw the 6 minute clip and then called his friend Dr. Norman Borlaug in the U.S.A, who was the father of the Green Revolution who had received, in 1974, the Nobel Prize for Peace, Dr Borlaug was credited with saving the Asian continent from starvation. He called him to ask if he had seen what was happening in Africa. Dr Borlaug said, "Africa?! I have never been there! I am too old!" At that time, Sasakawa Senior who was over 80 years old called again the following day and said, "If you say you are too old what should I say? Let's go to Africa!" So, finally, he was convinced. They agreed and also brought in former President Jimmy Carter and together they founded the Sasakawa Africa Association in 1986, so it will be 30 years old next year.

But do you know what? Thirty years later, here is the current Ethiopian famine again. Eight million Ethiopians are facing famine. Thirty years later! This is current. See what the ground looks like; these are animals and I didn't want to show you the worst pictures. It makes me want to cry. I didn't want to show you the human pictures. It makes me cry. That's why, when I was staying in the U.S.A. years ago, *donkey* years ago, whenever anyone asked me, "What are you going to do when you go back to Africa?" I would say, "I am going to rid that continent of famine." Here I am, a grandmother now; I'm looking at my twilight years and we are still having this. It is not acceptable, at all. It isn't. So I count the opportunities we have and that makes me wonder what it will take. Only 40% of arable land in Africa is cultivated. By the way, it's a very complicated continent, even for me who comes from there. Irrigation: only 6% of what is cultivated is irrigated. Youth right now—I know the whole world over we all have a youth issue, including in Europe—but imagine 65% of Africas are below 35 years of age. Many of these already have an education. If you take East Africa, if you take Kenya, we have a problem of idle, educated youth, you know? Population size, as I said earlier, is growing, but I still maintain,

in my greying years, that the next big market and technological advancement is in Africa. As I said, I may not be here; you young ones, including these very young professors, maybe those are issues you should work on.

I travel a lot; I'd need to show a map of the world and show where I have not been. I travel a lot; why do I still travel when I should be sitting around enjoying my grandchildren? Because what I promised myself when I was young is still a major issue for my African continent. I go to different continents: I go to Latin America; I go to Asia; I come to Europe; I travel across the continent of Africa. I see the richness of the natural resources; I see the biggest resource we have: human beings. I agree there is progress, but maybe it's not enough for us: it's not fast enough for me. I am very impatient: I normally tell people I'm sure I came out of my mother's womb running. I used to be a sprinter, by the way. I came out running, running. Even as a grandmother, I'm still running, because something bothers me. Whenever I see emaciated, sad, crying, poorly dressed African children on TV, in the media or in the villages that I visit, tears come from my eyes and they also come from my heart. I say, "This is not right." Whenever I travel to the U.S. where I went to school, I come back with used clothes for the villagers – I came from some village somewhere. I found myself winning an American scholarship, went to the U.S.; so I tell my children, whom I had there, please collect used clothes. I travel business class; I'm entitled to three suitcases; I fill two suitcases with the clothes and I clothe the children in the village. Am I crazy? Maybe I am. Does it make a difference? Maybe not, but it makes me feel as if I'm doing something. At the end of the day, all of us, if I were to listen to you, are doing great things wherever you are. I just happen to be on the stage talking to you.

You have done great things: scientists, athletes and so many things at the same time; thinking about family farms and the things you write about and the technologies you deal with, the technologies we all deal with, you know? We now want to go to the moon: I talked to some of you who are professors, or rectors or assistant rectors and I was asking them, "What is your particular discipline?" They have gone beyond the chemistry they have studied; they have gone beyond the science they have done. When we had Ebola, Switzerland went to Ebola- infected countries, so what I say is, "Wow! My goodness!" It can't be Africa alone to do it: we are all in this together and I think that we're beginning to see that now. Look at climate change; look at the SDGs; we're all signed on to them; look at when I come here, I eat great food that is all nutritious and so on. It is not even a whole lot, but you know when you come to the village, a child who has been hungry, a child who is not eating nutritious food, even a woman who may be hungry - you give them a loaf of bread, 500 grams, and they'll finish it in five minutes. They're hungry. Hungry poor people eat a lot more food-mountains- than those of us who are better nourished. Yes, I see it, I eat in Switzerland: you start with a little plate of something like this and then a nice plate comes with potato, salmon, with a vegetable and so on that's nutritious and your dessert comes; you still have it and imagine when you count the calories, they're not even a whole lot, but it is nutritious. You go to an African village when they have harvested-we call it *ugali*—they give you a big plate, a mountain like this with a few vegetables like this and then they become obese also. Here it is not as bad as that. Too much of one starch cannot constitute good nutrition. When we study food science and nutrition we say the food we eat has to be the right amount and also nutritious.

By the time I was 40 years old, I had already started travelling. I was everywhere: I'd already been to many parts of Kenya. At that time, the lifespan of a Kenyan was 46 years. I reached 40 and I said, "Gee, I'm about to die; Right? I'm just about to die. What will I leave behind? What is going to be my legacy?" I think I went through a crisis and in Kenya, people my age, when you die, you are taken back to the village to be buried. I thought to myself that I was going to be buried by people who have never seen me since I went to school: they'll be touching my body, looking at my face and they'll be saying, "My goodness. Where did she go? Now we are to bury her." So I decided to do action research in the area where I was born-sugarcane growing. They had put sugarcane to grow in a very fertile part and, lo and behold, I found my nutrition. I found kwashiorkor, marasmus, things which you don't read about yourselves anymore, but those who have been to Ebola countries, of course, you've seen them; if you've been to Africa in villages, you'll have seen them. Also, when I did my own PhD research, I was in the lab, but I also went to the field and do you know what? I found in Kenya, which used to call itself selfsufficient in food? I found malnourished children. I said to myself, "What?!" That's when I said no to lab work and I went to the field. But much later, is when I created a rural outreach programme to begin to address those issues. Beginning to address those issues mainly because I was now 40 and maybe by 46 I may be gone, and also to let me leave a legacy, something in the field, in the village where I was born and where I would be buried. I thank God I'm still alive; then I can talk to you people.

I started Rural Outreach Programme {ROP} whose mission was to work within those communities by building on their talents and skills. Western Kenya has plentiful rainfall and yet it was registering some of the worst poverty, some of the worst malnutrition in Kenya. It didn't make sense to me at all. I went by that and started in a very small area with the children, in a village whose population was 10,000. I involved the grandmothers to feed the children and you can still see what those children look like, even in terms of dress. Poverty is again something else and I always say, "Look, personally, I don't say I was poor, but I have felt hunger pangs, so imagine a child being hungry." Poverty, I can't say. In my village my father was a policeman, but he used to make sure we were taken care of at that time with not much money, but he was a dignified man. I normally tell people that it is not so much the amount of money you earn, it's what you do with the little you have. I targeted children mostly and as I went on, I realised it's food first, it's nutrition first. If you cannot feed your family, nothing else matters. As I went to those communities, they were not even growing maize. Kenya is so maize-dependent, as if it was our crop from the beginning. Yet really it was an imported crop from Mexico. We forgot all about the millets and the sorghums, which were more nutritious, about the pulses which some of us grew up on. You can imagine if I didn't eat those healthy foods at that time, I would not be standing as tall as I do and maybe I would be dead already in childhood. We'd been working to bring the maize crop to look like this from those small, small farms—one acre, one hectare... I realised that much as I had been talking about women, women, women, women, they were now empowered because I went in, I started when I was much younger, in a matriarchal society: women would never stand up to speak in front of men at that time. That was my community and yet the men would come to me and say, "Oh Prof, oh Ruth, oh Mama, I want my daughter to be just like you." I said, "You want your daughter to be just like me and you don't even allow your wives to speak? How?" Just working with them, I tried to show that we need to respect each other.

I'm much older now; I'm much older. I'm a grandmother. I'm a mother of twins. So in my community, I'm above any man; I tell them, "Look here; look here; men are the heads of households; we love them; let them be heads of households; but the women are the backbone. Where would the head sit without the backbone?" I don't know. Now it made sense to them

because many of the men would realise that they couldn't do without their wives. In fact, I had a research project one time which took the women away from their community for a week. We had to negotiate with the men: we wanted to take the women away to go and travel and what have you. By the time we came back, the men looked very hungry, scruffy. You know? (*Laughter*) And then we empowered the women and advised them: you know, the allowance we have given you, go by the supermarket, buy something nice for your man. Now when I go home,. It is the men who are asking me to bring back that project. The way we deal with gender is to recognise what the cultural set-up is, to make sure that even as we support the women, the men are also supported. We have and established an award scheme for the men, for the men who are supportive of the women. The fact of the matter is that it is mostly the women, and this is how it operates, who are on the farm all the time producing food, worrying about the children and so on and so forth.

But, as I said, it's not only food. My parents lost children to malaria; malaria is still a big killer of children, especially those under five. We still don't have a cure and I'm happy the Nobel Prize this year recognised the work on malaria. We started to put up a community hospital; that had been a childhood dream, to put up a community hospital. But it got completely highlighted when a woman called Ruth died in my car. She had delivered ten hours before; she was bleeding; I was going home and I found her by the roadside. She was on a wheelbarrow waiting for any vehicle. This was just in 2007. Before we even reached the hospital, she was already dead. So I started this project; I've got donor funding and it should be ready in January, other than the equipment, and the idea is to deal just with emergencies. People in Africa die from very small things, very small things. A child is sick; go and look for herbal medicine. Where is the hospital? It's so far away. In my own village, there's only one car around. Once you go there, they ask you about everything. We are sick, we can't educate our children, and so on. So we have these kinds of projects going on. We have projects on gender and youth; we have dairy projects - milk for children and women. We do it through the women so that they can also have their dignity. We have small animals; we have indigenous vegetables, so ultimately we are also looking at total nutrition because really that's what I went to school for.

Here are some of the things I show you. This lady here is an intern who came; she said she wanted to see what we do in the field. She stayed for a month and by the time she went back she asked me what she could assist me with. I told her that I was looking at small animals, goats and sheep, for the women. They are manageable; they don't intimidate the men; they can provide protein for the family; they can reproduce quickly to provide income for the family, and so on and so forth. She went ahead and got us some funds to begin to give this to the community; it's very empowering and is already a big project that is ongoing. We do education; we hold field days; we do vegetables and so on. Small things. Let me tell you: Africa is not poor for lack of money. No, a lot of money has come to that continent, a lot. Some of it is your taxes: European Union, DFID, U.K., USAID, America; a lot of money has come to that continent. Thank God I don't have anybody who can fire me from my job (I don't have one anyway!). Where does the money go? The World Bank gives loans. We are indebted as countries; our future generations will repay the loans; they will not see what they will have done. No. I was in the Kenyan parliament. I didn't contest; I was selected. We have a special system of selection to represent certain groups. That's how I got in, but when I tried to run – and one Kenyan lady, the late Wangari Maathai, was running with me at the same time - we were targeted and we lost and it was just bad for Kenya, the post-election violence. One wonders: "Where does the money go?" Politicians tell us that we are a poor country. Kenya is not a poor country; sometimes development funding goes back to the Treasury, unused. Meantime, people are hungry; children are not going to school. What is choking that continent, my country included? Sadly, it's called corruption; high-level corruption. Some of the richest people in the world are in Africa. Yes, Forbes showed us that data. They're in Africa. So, that's why I concentrate just on Western Kenya. I do my own thing there because I can account for what I do there. I encourage everyone in Kenya, in Africa, to go back to their village, back to

where they came from. You can do a lot and you will have friends to help you; with very little, you can do so much. I concentrate on that.

Water. Water is life. Look, this is the water I found them drinking. In fact, in Western Kenya it's better: it rains twice a year. You can find this water, but there are areas where women trek distances to look for water. Not good water as most of it contaminated. Then we have this old technology where water is sieved, it comes from the ground; it actually doesn't need boiling, it's good water, even when you do the tests because it comes from the source. That's why I was saying, the Laureates, hi-tech, at the end of the day, let me bring you back to where things really need to happen and you don't have to have a gold spoon for it. Is that right? Just appearing there, I also find that by going back to my roots even with friends from overseas, people get encouraged to do things better, otherwise poor people give up. They give up – no self-worth, no confidence; children, their children, they don't even know if their children go to school where they will end up anyway. But, I give them my own example: I didn't know where I would end up. So we have this ongoing work with all the men as well.

I guess I have a few pictures to show you. After 30 years in that community, where are we? If someone came to assess my work and said, "Ruth, don't you think you have failed?" and I said, "Maybe. Why?" They might say, "It has taken you 30 years in one community." Changing human behaviour is so difficult. Thirty years. And I say, "No, I have learnt a lot; it has been a learning curve for me. It's what I've been sharing globally." I hope when I speak across the world, the focus on women, no information, no extension workers, no credit and so on are all recognised. Even the G8, you know, the European Union. Now they tell you, look if you have a project, make sure women are a focus; make sure youth are included. When you do that, you don't know who is listening, but at the same time, you also feel satisfied that you are able to share something that is real.

Let me come to here. I think we can actually look at these issues. But before we look at that, just to let you know I sometimes talk to donors and I am aware of the times when the World Bank would give funding, loans and conditionalities; it was highly resented by governments. So, what's happening now? Money is given and nobody follows it up. Nobody. Now the big thing is land grabbing, land grabbing. The Chinese have come; they are building our roads; they are a different group; people don't know what they're about. What are they interested in? We don't know. They bring workers as well and do you know how many Chinese there are? Maybe they are looking to settle in Africa. I think the worrying part here is that because of bad governance, decisions are made and the citizens are not involved, so they have no idea what is going on. We just hear that land there is being used and so on and so on. We see Chinese around and we see some kids looking like Chinese and all that, you know? Just the fact that the citizens are not involved in all these discussions - participatory - and I see problems in the future because again bad governance and bad politics and you wonder what is changing hands as this happens. But coming down here to deal with these water and sanitation problems, they continue to be a problem. They are connected to Ebola. I'm sure you all saw pictures of Ebola. Even as a Kenyan, I could not believe the conditions in those countries. We have bad situations in East Africa, we have bad situations in Kenya, but I could not believe what I saw of Liberia, what I saw of Sierra Leone as they addressed the Ebola situation. The practices that we talk about, the hygiene that we take for granted. When I went to school, the first thing I learnt was to wash your hands and not just with water, but with soap. Imagine that we still have to go back to preaching that; something just hasn't gone right. Malaria still kills: we still do not have a cure. Even at this hospital I go to, we have a small clinic. I go and stand there as parents come. I teach them how to detect malaria and know what they should have on hand to make sure a child's fever goes down before they go to the hospital. Small, simple things improve children's survival chances; education is the key. I go round schools talking to teachers and encouraging them. Natural resources. When Wangari Maathai was given a Nobel Prize, people were saying, "Oh, you mean she's getting a Nobel Prize just because of trees?" This is how Kenya was talking. "Because of trees? What do trees do?" So

someone asked if we knew that trees make us get the rain and one politician said, "What? I thought the rain just came from the sky." What a shame, but it's only after she is gone that we're now celebrating her. We are seeing climate variability; it's affecting us too. It's not just here; it's a global phenomenon. I think it's bringing us all together. We're all going to be swept away by climate change.

I've talked again about the exploitation of the continent and how to remove barriers from between the countries. Africa has 54 countries and I think it's the continent with the largest number of visa stamps stamped between each other. Between each other! We say, "Can we look at the European Union? No, those are Europeans, don't compare them to us." My goodness, we can't reinvent the wheel; I think we are our own worst enemy. African Union is there; it marked how many years the other day? Fifty, I think. If you asked me what they have done—okay, they have decided after 50 years to support agriculture. They have realised that you need to help the people to support a country. They have realised that they have a youth issue and that they need to actually try and use agriculture to find jobs and even innovate. You know I just think that we need to invest in communities, men and women. There are many opportunities to partner.

So what is my message? Do I see us feeding you people? Do I see Africa feeding the world? Yes, in the future. Do I know what the future holds? No, but I think it's very clear now that we're all one and the same. You ignore any part of the world at your own peril: Ebola started in Guinea, right? It reached America; it reached the U.K. Did it reach here? Not yet. Look at the migration going on right now; I don't know what that phenomenon is. It started with Africans from West Africa sinking in the Mediterranean. I kept asking what they were running from. Was it just war? I wonder. If you took all these and asked them what they were running from exactly, each and every one... this is a new phenomenon across the world and it's changing the demographic profile of the world. It's very worrying. We've had that in Kenya as well: porous borders until the country doesn't really want to do a census of the north; because they have allowed so many people to come through, they're afraid to know how many have come through. We've had that as well. Look at what we are doing in those countries where we are coming from: is it enough to just send money, to just send resources? Can we make the environment friendlier for people to stay behind? I normally invite young people; young people are more daring; they are better at taking risks; they can come and I can tell you once you set your foot on the African continent, it changes you completely. Not to see the animals; we have the animals here. Okay, you can go to Maasai Mara and have fun, see the Big Five and so on, but I'm talking of the village; I'm talking of that village. It changes you completely. My message is that we all need to work on this together; we need to do better than we have done. Africa is a rich continent; it has a lot to offer. At the end of the day, the feeding, the food movement will be back and forth because we shall have realised that we are all one and the same and that we need each other.

I've had some partners to assist me and I just want to say thank you. Thank you for listening; I hope I've been able to bring you to the village, back to reality, away from the lab and away from your extremely nice environment which I enjoyed, by the way. Don't take me wrong; don't take me wrong, at all, and which I appreciate, but I also know that for our young people and for those of you who already work on that continent, I want to say *asante sana*, thank you very much, and I'm sure that you have a lot to share and appreciate, and you are welcome to my village, by the way. Thank you so much.