



## **Policies for building resilience for food and nutritional security**

### **Speech delivered by Dr. Akinwumi Adesina, Honourable Minister of Agriculture, Nigeria at the Brussels Policy Briefing on 'Agricultural resilience in the face of crises and shocks', Brussels, March 4th 2013**

I wish to thank you for inviting me to address this important meeting.

The issue of resilience reminds us of how susceptible we all are to forces of nature, such as (a) *climatic shocks* which reduce food supply and raise the price of food and vulnerability of the poor; (b) *health shocks*, which affect productivity and income earning potentials; (c) *unstable markets* that affect incomes, employment and wages; and (c) *environmental damages* which compromise the ability of agro-ecosystems to support sustainable agricultural growth. To assure food and nutritional security, policies and institutions are needed to enhance the ability of individuals, households and production systems to recover from the impact of shocks. Policy makers need to develop short-term and long term strategies to reduce food and nutrition vulnerability, while enhancing environmental resilience.

The long term solution to food insecurity is to raise agricultural productivity and boost food production. Nigeria embarked on a major transformation of its agricultural sector, with the launch of the Agricultural Transformation Agenda in 2012. Our goal is to add 20 Million MT of food to the domestic food supply by 2015 and to create 3.5 million jobs. We are driving import substitution by accelerating the production of local food staples, to reduce dependence on food imports and turn Nigeria into a net exporter of food. Nigeria has ended the approach of agriculture as a development program. We now treat agriculture as a business to generate wealth for millions of our people. But even as we do, we recognize the need to enhance resilience for food and nutritional security.

I wish to share with you today six policy areas for improving resilience, from our experience in Nigeria.

First, to assure increased agricultural productivity, it is critical that farmers (I mean *genuine farmers*) get access to affordable agricultural inputs. In Nigeria, we launched the first ever database of farmers in the country. We started with registration of 4.2 million farmers in 2012. We are expanding this to 10 million farmers in 2013. This allows us to know our farmers and better target policies to support them.

We implemented radical reforms of our fertilizer and seed policies. We ended four decades of corruption in the fertilizer sector within 90 days, by taking the government out of the procurement and distribution of fertilizers and seeds. We launched the Growth Enhancement Support (GES) through which farmers receive subsidised seeds and fertiliser via vouchers on their mobile phones - or Electronic or E-wallets. These electronic vouchers are used just like cash to buy seeds and fertilizers directly from agro-dealers. Nigeria is the first country in Africa to launch an electronic wallet system for the delivery of subsidised inputs to farmers.

Within 120 days of the launch of the program, 1.2 million farmers received their subsidized seeds and fertilizers through their mobile phones in 2012. Our target is to reach 5 million farmers in 2013. The GES also stimulated major changes in the input supply system, as seeds and fertilizer companies developed supply chains to reach farmers in rural areas. Fertilizer companies sold \$100 million worth of fertilizers directly to farmers, instead of to government. Seed companies sold \$10 million worth of seeds directly to farmers. Banks lent \$20 million to

seed, fertilizer companies and agrodealers. The default rate under the scheme was zero percent. Because we were able to reach our farmers directly with farm inputs, and stimulated wider markets for agricultural inputs, agricultural productivity and food production rose by 8.1 million MT in 2012. An *agricultural revolution* was unleashed.

Second, we are complementing the agricultural revolution with *financial revolution*. We are expanding farmers' access to financial services, to allow them to build their productive assets, diversify income sources and enhance their resilience.

To achieve this, the Central Bank of Nigeria has established a \$350 million risk sharing facility (NIRSAL) to reduce the risk of lending by banks to farmers and agribusinesses. The facility will leverage \$3.5 billion of lending from banks to agriculture. It will also reduce interest rates paid by farmers from 18% to 8%. In 2013, NIRSAL will share risks with banks to lend \$ 400 million to the private sector seed and fertilizer companies and agrodealers. This will make agricultural inputs available to 5 million smallholder farmers across the country in 2013. Government is also recapitalizing the bank of agriculture to lend at single digit interest rates to farmers.

Third, we are building our capacity to predict shocks to inform risk management. We are deploying satellite imagery and remote sensing tools to better assess the effects of climatic shocks on food production.

When we experienced a major flood in September of 2012 - the worst in decades- there was panic and many asked for the declaration of the state of emergency. Of course, food importers, sensing an opportunity to make quick money, fuelled media reports of 'looming food crisis'. As Minister of Agriculture, I was under pressure to throw the doors open for another flood: the flood of food imports. I knew the situation was serious, but definitely not as bad as was being painted. I had to make a decision, based on evidence, not hype or hues and cries in the media.

In partnership with the International Water Management Institute, we deployed satellite imagery and remote sensing tools to determine the extent of the inundation across the country. Our estimates showed that no more than 1.4 million ha of land was inundated and only 467,000 ha of land were expected to suffer crop loss. This represented only 1.17% of the total cultivated area. I told the country there would be no food crisis.

Five months after the devastating floods, there is no food crisis or famine. To address the issue of recovery from the floods, we put in place a Flood Recovery Food Production plan, including provision of free early maturing seeds, fertilizers and farm implements to farmers affected by the floods. We released 40,000 MT of food from our strategic food reserve to cushion the impacts on flood affected families. We embarked on accelerated dry season cultivation of rice and maize, with expected production of 1.2 million MT of rice and 500,000 MT of maize.

Fourth, we have put in place policies to encourage the cultivation of drought tolerant crops (cassava and sorghum) and develop markets for them to enhance resilience in food systems. We launched a major effort to turn Nigeria into the largest processor of cassava and sorghum in the world. We are using fiscal policies to encourage the use of cassava for production of high quality cassava flour to replace some of the wheat we import for use in bread and confectionaries, production of starch, dried cassava chips for export, high fructose cassava syrup for sweeteners, sorbitol and ethanol. Cassava bread, made out of 20% cassava flour and 80% wheat flour, has hit the market in Nigeria, and is cheaper than 100% wheat flour bread. This will put over \$1 billion back into the pockets of cassava farmers and processors. We secured 3.3 million MT of contracts for export of dried cassava chips to China in one year. We have attracted major global players, such as Cargill, Unilever and Nestle to invest in the production of starch, sweeteners and sorbitol from cassava. We are also encouraging the private sector to turn sorghum into high energy foods to serve local and regional markets.

Fifth, we are promoting policies to improve water management. Under climate change, there will be greater variability of weather and we expect greater incidences of floods and droughts. We need to emphasize improved water management and greater water use efficiency. The level of irrigation in Africa is low, as less than 3% of all arable land is under irrigation, compared to close to 50% in Asia. In Nigeria, despite having 200 dams, only 150,000 ha or less than 1% of cultivated area is irrigated.

We need a fundamental paradigm shift on irrigation. Instead of large public-sector irrigation schemes with massive dams, greater priority should be put on small scale agricultural water management systems. The International Water Management Institute estimated in Sub-Saharan Africa that agricultural water management systems can employ 45 times more people and cover 35 times more land than large scale public irrigation schemes. Small scale reservoirs can reach 369 million people and generate \$ 20 billion per year; access to motor pumps can benefit 185 million people and generate \$22 billion per year; in-situ water harvesting can benefit 147 million people and generate \$ 9 billion per year; and communally managed river diversions can reach 113 million and generate \$14 billion per year.

Targeted policies we are going to put in place for better agricultural water management include subsidies for the ownership of motorized pumps especially by women farmers, financing the leasing of irrigation equipments, provision of community loans for the management of water sheds, establishing youth-led irrigation service providers who rent out motorized pumps, and provision of subsidies for alternative energy in rural areas to allow the powering of motorized pumps.

To reduce the risk faced by farmers, we will focus on scaling up of weather index insurance schemes for farmers. Because many farmers will not be able to afford the cost of insurance premiums, subsidies will be provided to support farmers and reduce the high fixed cost of development of insurance products by insurance companies. Area-based flood insurance schemes will be established in areas prone to floods.

Sixth, social safety net policies are being used to reduce vulnerability, especially for women and children. These include conditional cash transfers, school feeding programs and nutritional interventions. Our “Saving one million lives” initiative targets the use of community management of acute malnutrition and integrated child feeding to reduce undernutrition. Already, 200,000 severely malnourished children are receiving care. Nigeria released 3 pro Vitamin A cassava varieties, in partnership with the International Institute of Tropical Agriculture, the Global Alliance for Improved Nutrition and the Bill and Melinda Gates Foundation. In partnership with the International Potato Center, Nigeria is promoting orange flesh sweet potato (which is rich in beta carotene), with the goal of reaching 1 million households by 2015.

Finally, we are managing price volatility. We have completed a total of 1.3 million MT of silos capacity. These will be used for expanding our strategic food reserves. We will also use them to develop a nation-wide agricultural commodity exchange to expand markets for farmers and reduce price volatility. Also needed are policies to promote improved farm-level storage systems to reduce high post-harvest loses in the food supply system. Regional food reserves should also be supported. In 2012, Nigeria contributed 32,000 MT of grains to support Niger republic to address food shortages.

In closing, successful management of agriculture in the face of shocks requires the integration of policies, institutions, technologies, systems and tools for enhancing resilience. Research and development institutions need to be supported to develop technologies for reducing yield variability. Farm and non-farm employment should be promoted, as well as remittances. We must work across borders to build regionally integrated weather monitoring systems for characterizing impacts of weather patterns and for seasonal rainfall forecasts. The focus of policy makers and donors should therefore shift away from crisis management to risk

management; combining early warning systems, disaster planning, management and recovery plans.

The times are different now, and we must use agro-ecological approaches to build robust and resilient agricultural systems, able to meet our food needs now and well into the future.