

## **NERICA AND THE UNITED NATIONS MILLENNIUM DEVELOPMENT GOALS**

### **Background information**

The development of NERICA through the partnership-owned Research for Development system has helped WARDA in addressing the United Nations Millennium Development Goal (MDG) priorities. Here are a few illustrations.

### **MDG1 – Eradicate extreme poverty and hunger**

NERICA whose large-scale diffusion was driven by enthusiastic farmer participation has already demonstrated significant impacts on poverty alleviation. In Benin, for example, increased yields as a result of NERICA adoption have increased women farmers' income by USD 337 per hectare of NERICA cultivated (Agboh-Noameshie *et al.*, 2007).

### **MDG2 – Achieve universal primary education**

In 2003–2004 a survey conducted by WARDA in Benin (Module 14) in partnership with the national research program (INRAB) showed that in farming families adopting NERICA there was:

- a 6% increase in children's school attendance rate
- a 3% increase in youngsters continuing primary education
- about USD 20 increase per child in school expenditure.

A study of NERICA rice growers in Uganda also highlighted schooling as a priority (Kijima *et al.*, 2006a and 2006b).

### **MDG3 – Promote gender equality and empower women**

The majority of upland rice farmers in SSA are women, who supply 52% labor in land preparation, 80% in sowing, 88% in weeding and 80% in harvesting. The short duration of the NERICA varieties are one of their major attractions for farmers. This can be a useful trait to escape drought and compete with weeds. Women rice farmers are mostly tasked with weeding activity in the field.

### **MDG4 – Reduce child mortality**

The same survey referred to above (MDG2) revealed:

- a 2% reduction in the frequency of child sickness in these families
- a 5% increase in attendance at hospital when children fell sick
- about USD 12 increase in family spending on child healthcare

Better harvests with more yield put extra cash in NERICA farmers' pockets to fund schooling, medical care and better diet.

### **MDG5 – Improve maternal health**

The protein content of some of the NERICA varieties has been found to be 25% higher (average of 10% protein for these NERICA lines vs. 8% for Asian rice in the world market). As the NERICA varieties have higher protein content than other rice varieties and are more nutritious than many of the traditional staples, farmers growing NERICAs have improved their diets. An improved diet leads to better health and there is a greater chance that a healthy mother will give birth to a healthy child than a weakened mother.

### **MDG6 – Combat HIV/AIDS, malaria and other diseases**

As the largest employer in SSA, agriculture is particularly affected by HIV/AIDS. This places a greater burden on the surviving farmers which can be eased by the introduction of improved crop varieties.

For example, the high yielding NERICA varieties are also early maturing and thereby lessen the labor burden.

The CGIAR Systemwide Initiative on HIV/AIDS and Agriculture (SWIHA) is promoting NERICA technology as part of its program to mitigate the effects of the pandemic on farmers.

### **MDG7 – Ensure environmental sustainability**

Benefits from NERICA varieties lie not only in improved food security, better diets and higher incomes for resource-limited farmers but also through less pressure on the environment. Since some of the NERICA varieties seem to cope well with less water in drought-prone environments, farmers may no longer have to practice slash-and-burn agriculture.

### **MDG8 – Develop a global partnership for development**

Rice imports are draining more than USD 1 billion from precious foreign exchange reserves in SSA. Projections by WARDA show that a 20% increase in NERICA planting in SSA countries could result in a 5% reduction in the rice import bill. A range of partnership models including work with advanced universities, NARES and donors is being explored to accelerate NERICA dissemination. In 2006 it was estimated that about 200,000 hectares were under upland NERICA production in SSA.