Excerpt from C. Ford Runge, et. al. (2003) *Ending Hunger in our Lifetime: Food Security and Globalization*, The Johns Hopkins University Press, Baltimore MD, pages 1-5.

THE HASSANS- A Portrait of Hunger

Meet the Hassans. The Hassans live in Bangladesh, a country of some **128** million people about the size of the state of Wisconsin, which is one of the poorest countries outside of Africa. Eighty percent of Bangladeshis live, like the Hassans, in small agricultural villages. Much of the country is a vast rainfed delta where rice is the major staple. The monsoon rains of summer are the source of life, but too much rainfall and runoff, accelerated by deforestation in the mountains, can mean excessive flooding, killing young rice plants. Too little rain means drought and death for animals and people, especially the old and very young. The vagaries of nature, especially water, spell life or death for the Hassans and people like them who live on the edge. The Hassans' days are filled with hard physical work, and they are frequently sick. Their lives are defined by a daily struggle to eat. Millions more in Bangladesh and hundreds of millions throughout the developing world live like them.

The Hassan household includes a husband of 59, a wife of 44, two sons ages 14 and **11,** and a 7-year-old granddaughter. An elderly invalid aunt also lives with them. The couple also has two older sons who have gone off to find work. The sons are not currently sending any money home, although such remittances are common. The parents have no formal education, but their 14-year-old has completed the eighth grade and their 11-year-old the fifth grade. Like many such families, they have lost children to early death. One, a boy, died at two from tetanus, a terrible infection for which vaccination is common elsewhere in the world. A baby girl died after only seven days.

The family has three small plots of land, all owned by Mr. Hassan, who inherited them from his family. One, where their home sits, is a plot of about 2,500 square feet. The second is located a short distance away and is about the same size. The third, and largest, is half a mile away and is about 40 yards on a side, the size of a large garden plot for many suburban households in Europe, the United States, and other rich countries. The three plots total less than half an acre (0.45 acres) or 0.18 hectares. They depend on these parcels for enough rice, wheat, and vegetables to meet most of their daily food needs. During the monsoon season, the plots are subject to flooding. Their home has a floor of packed earth and a thatched roof.

It is divided into a kitchen, a bedroom, and a shed for farm animals. The poultry owned by the family are kept in the kitchen at night. Mrs. Hassan cooks on the kitchen floor on a stove made of clay. Drinking water comes from a village well. Baths are taken in a nearby pond. Their toilet is an open pit.

Mr. Hassan pulls a rickshaw in a nearby village market (a job for only the poorest and most uneducated men in Bangladesh). This is the family's main source of income; there is no surplus from the farm. Mr. Hassan works an average of nine hours a day, 25 days a month, and earns the equivalent

of about US$20 for a month's work. Despite his nine-hour days pulling human and other cargo, he and the family spend much time tending their plots. Mrs. Hassan divides her time between working as a manual earth digger and household activities and farming. As an earth digger she makes a little less than 50 cents a day, usually on public road improvement projects. Such projects come only periodically. The two sons attend school and help with chores. Throughout the year, the Hassans spend much of their time farming. At harvest, Mr. Hassan takes time away from his rickshaw, spending 14 hours a day harvesting and threshing (separating the grain from the straw). Mrs. Hassan will spend 13 hours threshing in addition to time spent on household chores.

The Hassan family grows rice, wheat, jute, and some vegetables. They are normally able to raise two crops a year on each plot. Their largest harvests during the year were 269 pounds of rice grain and 352 pounds of rice straw from the rice crop planted during the monsoon season, which runs from June to September, plus 528 pounds of wheat and 396 pounds of by- products raised during the dryer winter season (October-April), and 88 pounds of rice and 220 pounds of straw during the spring (April-June). The cropping seasons overlap somewhat, thus involving different plots. They used a small amount of urea fertilizer to improve their yields. The family picks and eats some 100 mangoes off a tree on their property each year.

They own a goat and a chicken. They once owned a bullock, but it died. Mr. Hassan is primarily responsible for farming tasks. Mrs. Hassan helps with the harvesting and does the winnowing (separating the grain from the husks) and drying of the rice. The jute is dried and sold for cheap cloth and burlap. All the rice is stored by the family for future consumption, but they must also buy additional rice with the money they earn from rickshaw pulling and earth digging. There are other cash outlays: Mr. Hassan hires the services of a power tiller operator for cultivation and purchases seed and fertilizer.

All told, the family's yearly cash income is a little less than $400, mostly from the rickshaw, which accounts for nearly three-quarters. Their major asset is the land, valued at about $917. Other assets include metal utensils ($10), a radio ($31), jewelry ($6), a wall clock ($5), the rickshaw ($42), and a large tree ($10). They have no bank account; household earnings are kept at home. Sometimes they have to borrow. One time they borrowed from a micro credit bank for farm expenses of $125, which they paid back with 15 percent interest. Another time they borrowed $83 to buy their rickshaw from a community bank set up by a Western non-government organization (NGO). The family also borrows smaller amounts from relatives, neighbors, and the local money lender.

In one month, household costs were $39. Food accounted for just over half these costs-rice accounted for 64 percent of food expenses, fish for 11 percent, and vegetables for 12 percent. No meat or dairy products were purchased. Over six months, 12 percent of their nonfood costs went to medical services, 24 percent to clothing, 22 percent to gifts for a wedding and other occasions, 18 percent to their sons' education and transportation, and 13 percent to house repairs and personal care. The seven-year-old granddaughter will someday need a dowry to be able to marry. The Hassans eat twice a day. In the morning the family has *panta bhat*, a dish made with leftover rice, water, and salt, with green chilies and onions. At night they eat rice and *bharta*, a dish of crushed green chilies, garlic, and salt. Children arc sometimes given a snack of *muri*, a puffed rice.

In a typical 24-hour day, Mr. Hassan consumes 1,708 calories, Mrs. Hassan 1,491 calories, the older son 1,419 calories, the younger son 1,489 calories, their granddaughter 1,063 calories, and the elderly aunt who is sick eats almost nothing, only 288 calories. Mr. Hassan is about 5 feet, 4 inches tall and weighs 104 pounds. Mrs. Hassan is 4 feet, 10 inches tall and weighs 78 pounds. Mr. Hassan's body

mass index (BM1)-a widely used measure of adult nutrition-is 17.5. BMI is determined by dividing a person's weight in kilograms by their height in meters squared. A BMI of 18.5-25 is considered normal. Anything below 18.5 indicates chronic under-nutrition.

Mrs. Hassan's BMI was 16.8. The sons suffer from both reduced height and extremely low weight, as does the granddaughter. Based on nutrient recommendations for India, Mr. Hassan's recommended daily allowance (RDA) would be 2,800 calories for moderate work and 3,900 for heavy work, such as rickshaw pulling and farming. Mrs. Hassan's RDA is 2,200 calories for moderate work and 3,000 for heavy work, such as earth digging. The older son's RDA is 2,500 calories and the younger son's 2,100 calories. The granddaughter's is 1,800 calories (Gopalan, Sastri, and Balasubramian 1971). The Hassan family are so far below their RDAs that they suffer from chronic energy deficiency. Their diet is also deficient in many essential vitamins, minerals, and proteins. The Food and Agriculture Organization's (FAO's) minimum energy requirement for South Asia is 1,780 calories, assuming only light physical activity. Mr. and Mrs. Hassan are below this minimum.

The average price of rice means that it costs 40 cents a day to satisfy the total of 7,458 calories for the family, assuming rice is all they eat. An adequate calorie intake, using FA0 measures, would cost 70 cents a day, nearly all of the 72 cents Mr. Hassan makes pulling the rickshaw, leaving only 2 cents for their other household needs. Economists talk about the "subsistence margin": for the Hassans there is no margin left. Mr. Hassan recently suffered a fever, leaving him unable to work for five days. Now the family must borrow money or sell assets, perhaps even their land, to make ends meet. Poor nutrition makes them easily sickened, reduces their ability to work, and affects the children's physical development. We cannot measure what hunger does to their mental state.

For most Americans and citizens of other developed countries who have not traveled in developing countries this portrait of the Hassans may be shocking. We are wealthy compared with much of the rest of the world. Someone in the upper-middle class with an annual household income of $75,000 or more is richer than 95 percent of the rest of the world's people-richer than 99.9 percent of all the humans who have ever lived (Brooks 2002). Those of us in this minority live in a world that may seem far removed from the Hassan family. We have the privilege of planning for a future many poor families may never know. This book is about that future.

Global Village

The struggles of one family, lost in the sea of humanity that is South Asia, are far-removed from global debates over trade, environment, and agriculture. But it is families like the Hassans who are the names and faces of world hunger, and it is because they must also be part of the solution that this book was written. In the chapters to follow, we will take a new look at what globalization means for food security, and what food security means for globalization. Both terms are suited more to rhetoric than to the reality faced daily by millions of poor families.