ABOUT VIET NAM
In Viet Nam, change is the word of the moment—and change has been swift and universal. The population, now 94 million people, has steadily increased in recent decades, alongside rates of urbanization and incomes, with GDP per capita at US$2,000, while poverty rates are falling. The country is transitioning quickly away from its long-standing position as an impoverished, agrarian society, to become a globally connected, urban-centered, educated, and economically stable nation. Classified by the World Bank as a low middle-income country, Viet Nam still faces many challenges: according to a 2016 report from the Viet Nam National Institute of Nutrition (NIN), rates of undernourishment of children under age five are still at 24.6 percent, while a 2011 report showed the percentage of overweight children increased extremely rapidly between 2000 and 2010, from 0.62 to 5.6 percent. The country struggles with environmental threats from unsustainable intensification; ensuring food safety; and creating job opportunities for young people.

Society-wide transitions are challenging to navigate, and even more so when the changes come quickly. Viet Nam is suddenly full of more people, flocking to its cities, with more money and more food choices than ever before. Its rapidly evolving food systems, markets, and healthcare make this Southeast Asian nation a natural focus for the CGIAR Research Program on Agriculture for Nutrition and Health (A4NH).

ABOUT A4NH
Hunger, malnutrition, and poor health are widespread and stubborn development challenges, even in countries where other aspects of development are moving forward. A4NH, an Integrative Research Program, responds to the global challenge of improving food security, nutrition, and health, by taking a perspective that begins with consumption, rather than supply, of healthy, affordable, and safe foods. A4NH offers an innovative look at the relationship between agriculture, nutrition, and health through research that strengthens the knowledge base and new partnerships that lead to real outcomes.

A4NH IN VIET NAM
Viet Nam is an A4NH focus country, along with Bangladesh, Ethiopia, India, and Nigeria. Its work is coordinated by the International Center for Tropical Agriculture (CIAT), a CGIAR Research Center with a long history in the country. CIAT is joined by the A4NH Lead Center, the International Food Policy Research Institute, as well as Managing Partners Bioversity International, the International Livestock Research Institute, and Wageningen University & Research. This coalition works closely with national partners including NIN, the Hanoi University of Public Health, the National Institute of Veterinary Research, the Viet Nam National University of Agriculture, the Ministry of Agriculture and Rural Development, the French Agricultural Research Centre for International Development, and groups such as the platform on Markets and Agriculture for Cities (MALICA).

A4NH’s work in Viet Nam is focused around four of the program’s five research flagships.

Food Systems for Healthier Diets
The study of food systems involves investigating the different activities, processes, infrastructures, and institutions involved in production, processing, distribution, and consumption of food, and the various links between multiple actors: food producers, food-chain actors, policy makers, and consumers. Accordingly, work to modify diets to include healthier, safer foods must look at the entire food system. A4NH researchers are doing just this in Viet Nam, where diets are changing rapidly and interventions need to be carefully targeted to assure healthy transitions. To reach consumers, they are considering multiple entry points into communities with a particular focus on women and youth, including schools and traditional to modern markets in neighborhoods as spaces to influence purchasing decisions. To understand connections between consumer choice and diet diversity, they are studying the influence of urban food environments and retail...
diversity, together with nutrition and food safety knowledge and attitudes, on consumer decision making, and subsequently diet quality. In working with producers, they are looking at how innovative incentives might impact decisions made by smallholders, a critical producer group in Viet Nam. To better understand markets and how policies might address the broad and varying food sector, researchers are studying and assessing those in both urban and rural settings. As the pieces of the puzzle come more into focus, researchers can work with policymakers on targeted interventions in the broader food system to provide opportunities for healthier diets in this dynamic setting.

**Food Safety**

Pork is very popular in Viet Nam, with the average person consuming nearly 30 kg per year. Most comes from very small farms and is sold in traditional wet markets. Food safety is a high priority for the Vietnamese government, yet establishing regulations in this type of environment is challenging. A4NH researchers from ILRI have been working closely with government officials to better understand hazards and assess risks, and contributed to “Viet Nam Food Safety Management: Challenges and Opportunities,” convened by the government of Viet Nam. A4NH research has provided critical evidence on the safety of perishable foods and the importance of traditional markets, the first-ever quantitative assessment of Salmonella in pork, and the first-ever cost of illness of food-borne diseases. Armed with this kind of knowledge, researchers and officials are working with a coalition of national and international partners to improve pork safety by developing, testing, and promoting incentive-based interventions and recommendations that are equitable, sustainable, and scalable.

Researchers are also studying other areas of food safety, including the impact of aflatoxin, a mold that affects crops and can be harmful to humans and animals, and ways to mitigate this threat; and risks associated with chemical hazards including antibiotics, heavy metals, and banned chemicals in pork, which impact the pig value chains.

**Supporting Policies, Programs, and Enabling Research Through Action (SPEAR)**

One component of A4NH’s research focuses on looking at the overall policy environment and how research can inform and support policy decisions. To better understand the political and broader environmental determinants of change in nutrition, researchers will undertake a Stories of Change in Nutrition study in Viet Nam. Part of a larger series of studies in process around the world, work in Viet Nam seeks to identify the main drivers of stunting reduction in recent years. This involves looking at the history of the issue, the policy environment, and the larger nutritional situation in Viet Nam, including food availability and diet diversity.

**Improve Human Health (IHH)**

A4NH seeks to understand and mitigate agriculture’s impacts on human health. Researchers are assessing risks associated with anti-microbial resistance, particularly as they impact the pig and poultry value chains; implementing an intervention study for a rationalized use of antimicrobials in livestock production; and conducting preliminary qualitative studies to inform effective antimicrobial stewardship policy and action by understanding how antibiotics are used by smallholder farmers and their animal health networks.

A4NH researchers are also investigating pig-associated neglected zoonoses like trichinella and cysticercosis, and emerging diseases including Japanese encephalitis. With partners, they have developed risk maps for climate-sensitive diseases, and will soon begin studying agriculture-associated vector-borne diseases in urban areas.