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Nation Religion King

Ministry of Agriculture Forestry
and Fisheries

Country paper on
Food Safety Overview in Cambodia

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1. Demography

Cambodia is located in South East Asia and has a total area of 181,035 km². Cambodia has a coastline of 435 km, and its land border of 2,438 km runs along Thailand to the west and north, Vietnam to the east, and Laos to the north. Cambodia composed 20 provinces, 4 municipalities, 183 districts, 1,609 communes and 13, 406 villages. The population is currently estimated at 13.01 millions (about 2.16 millions families) with growth rate of 2.4 percent per annum. Gender proportion is about 50 percent of total population. Population is characterized by a high proportion of young people, with 53 percent of 20 ages and about 69 percent below 30 ages. Economic growth is based on agriculture and 85 percents of population is living in rural areas. Real GDP growth of 5.2 percent in 2003 and per capita GDP is around US$300, and Human development index 0.556 reflecting to high poverty and food insecurity. However through the government effort, domestic revenue increased by 3.1% of GDP from 8.1% of GDP in 1998 to 11.2% of GDP in 2002, it declined to10.4% of GDP in 2003 reflected a strong rebound in agriculture production and declined of non-agriculture growth due to SARS-related drop to tourism and election related uncertainties in the business environment (MEF-July 2004).

Therefore, the commitment of the Royal Government of Cambodia is to reduce poverty and inequality, and improving quality of live of Cambodian people, so that all Cambodian can enjoy the benefits and participate in the development process.

2. Food production

Cambodia is one of poorest and least developed country in the region. In 2003 Cambodia is ranked 130th out of 175 countries worldwide and the human development index was 0.556. This has slightly improved over the period 1990-2000 (NPRS-2002). Per capita GDP was around US$ 259 in 2001 and US$300 in 2003 due to high poverty and food insecurity. Life expectancy of men in Cambodia is about 56.4 years (women 58.3% and men 54.4%). Adult literacy rate is 67.8 percent. The poverty line is officially defined as the level of expenditure required to ensure consumption of 2,100 Kcal person per day. Poverty in Cambodia has many dimensions and remains widespread. About 36 percent of Cambodian population is living below poverty line of 1777 riels or of US$ 0.46-0.63 at the current exchange rate. Among other factors prolonged civil conflict, displacement and discriminatory development process are main causes of poverty in Cambodia. Poverty in Cambodia is largely resulted high population growth (about 2.49%), inadequate opportunities, low capabilities, social exclusion, food insecurity and vulnerability.

Food availability in Cambodia is based on agriculture production. In 2003 agriculture contributed about 40% in national GDP and agricultural growth 9.2% in GDP due favorable climate condition for agriculture. Rice is the main predominant staple food in Cambodia. An estimated is about 68 percent calories intake with the rest derived from
fish, meat, tubers, vegetables, fruit and others. Food production is dominated by rice, which in 2003 accounted for around 70 percent of the value of the crop production and 23 percent of GPD (Ministry of Planning-NIS, and fund staff estimated).

Rice is the staple food of the population in Cambodia and accounts for 68-70 percent of daily calorie intake. The remainder is derived from fish, maize, root crops, fruits and vegetables. Though, 21.8 percent of household expenditure on food (including own-produced supply) is spends on meat, egg, fish and 15.5 percent on rice.

In 2003, a total of rice area 2.3 million ha and production of paddy was 4.8 Million tones and it was food surplus about 686,500 tones of rice at national levels. Food crops, other than rice, are also grown through out the country. In 2003 cash crops and important subsidiary crops was planted around 320,000 ha and production 1.14 million tones.

Livestock and animal production is also main source of protein and incomes for Cambodian people. Base on national statistics in 2003, Cambodia had around 3.65 million of cattle, 2.3 million of pigs and poultry about 16 million domestic use. Fishery production is also contributed for protein and food intake, a total of 18.5000 tones of fish was in 2003.

3. Hygiene and sanitation

Health problem is a main cause of poverty. Poor health is major cause of impoverishment and other form social deprivation such loss educational and employment opportunities. The poor always tend to have worse health. The poor are less likely to know good health habits and hygiene as well as sanitation. Common diseases faced by the majority of the poor include malaria, tuberculosis, dengue fever and HIV/AIDS.

Most of the health problems faced by people in rural areas are linked to a lack of basic knowledge in health and hygiene. These support negative and behavior in relation to safety of water, cleanliness of environment, and event the state of personal health and hygiene. For instance, there is not enough understanding of what cause of diarrhea, how it can be prevented or treated.

Diarrhea is major cause of morbidity and mortality, especially for people living in river bank with poor hygiene and marginalized tribal people. Diarrhea deaths occur quite often in very poor, remote areas of the country.

Tuberculosis also affects especially the poor, who living in poor hygienic and overcrowded conditions. The spread of HIV has dramatically increased the prevalence of TB.

The situation of drinking water and sanitation is very poor in Cambodia. Cambodian people are living without clean water and hygienic sanitation and with these results are widely prevalent of water-born and communicable diseases. 29% of population are living in rural areas access to drinking water and urban is 69.5 in 1999. Only 8.6% of population is living access to hygienic facilities, while in urban access to 49% in 1999 (table 1)

Infant, under-five and maternal mortality rates are high in Cambodia. Infant mortality and under-five mortality 95 per 1,000 live births, 124 per 1,000 live births, respectively, while the maternal mortality ratio is 437 per 100,000 deliveries (Health survey 2000). The infant mortality rate among the poor is 95 per 1,000 live births compared with 47 per 1,000 live births among the well off (DHS 2000).
**Table 1. Target for poverty reduction**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline (year 2000)</th>
<th>Target (2007)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty rate</td>
<td>36</td>
<td>29</td>
</tr>
<tr>
<td>Real GDP</td>
<td>5.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>95/1000 live births</td>
<td></td>
</tr>
<tr>
<td>Under-five mortality rate</td>
<td>125/1000 live births</td>
<td></td>
</tr>
<tr>
<td>Maternal Mortality ratio</td>
<td>437/100,000 live births</td>
<td></td>
</tr>
<tr>
<td>Under-five underweight</td>
<td>45%</td>
<td>31%</td>
</tr>
<tr>
<td>Stunting</td>
<td>44%</td>
<td>30%</td>
</tr>
<tr>
<td>Wasting</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>Access to drinking water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>29%</td>
<td>40%</td>
</tr>
<tr>
<td>Urban</td>
<td>69.5%</td>
<td>87%</td>
</tr>
<tr>
<td>Access to hygienic facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>8.6%</td>
<td>20%</td>
</tr>
<tr>
<td>Urban</td>
<td>49%</td>
<td>90%</td>
</tr>
</tbody>
</table>

Source: Ministry of Planning, SEDPII 2001

Data from DHS (2000) shows the prevalence of malnutrition under-five (6-59 Months age) was around 45 percent (both underweight and stunting), while is slight improvement from a prevalence rate of 48 percent in 1996. However, wasting was increased from 13 percent in 1996 to 15 percent in 2000.

Awareness of good health and nutrition practices, inadequate of childcare, low levels of education and inappropriate wearing are also factors for malnutrition and illness. Cambodia confronts huge problem of nutrient wastage through diarrhea diseases. Urgent action to invest in clean water and sanitation are therefore a pressing food security issues. The multiplicity of inappropriate belief and practices the surround food utilization issues indicate that an educational solution is needed. With this regard, there is a need to improve linkages between agriculture, health, education and rural development sectors so that health, nutrition and sanitation issues can be improved and mainstreamed to extension programs, training and school curricular.

### 3. Food safety overview in Cambodia

Cambodia jointed the Association of South East Asian Nations (ASEAN) in 1999, there by acceding to 27 ASEAN agreements. The four specific conditions were covered in agreements are food security, tariff, services and investment. Under agreement on the Common Effective Tariff Scheme (CETS) for the ASEAN Free Trade Area (ATFA) signed in 1992, Cambodia was given until 2009 to reduce tariff to between 0 to 5 percent on goods in the ‘inclusion list’, and until 2017 to make cute on sensitive agriculture products. Moreover, Cambodia has fully jointed to the World Trade Organization (WTO). With this context, Cambodia need to consider about food safety and consider the good
manufacturing practices as well as HACCP prerequisite programs and Codex to ensure
good quality of goods and food safety.

The Government of Cambodia has identified in the National Poverty Reduction
Strategy, the Cambodian Millennium Development Goal and in the rectangle strategy
about, food security, health and nutrition include food safety. Food safety office was
established in the Department of drug and food of the Ministry of Health. Food law was
established and addressed on safety and quality of goods including food for the
management and control of quality and safety of products and services. The food safety
in Cambodia is responsible by relevant ministries such as the Ministry of Health,
Ministry of Agricultural Forestry and Fisheries, Ministry of Industry, Mines and Energy
and Ministry of Commerce. While each ministry has capacity, surveillance of
contamination (chemical, physical and biological) in food, food toxicity and foodborne
diseases is limited.

As a member of ASEAN and WTO, Cambodia has prepared itself in global and
regional food safety networks such as establishing of the Cambodian national codex
committee, Network for pesticides regulatory database, focal point of ASEAN Plant
Health Cooperation Network, joint ASEAN food safety network, harmonization of Codex
standards, phytosanitary, maximum residue Limits of pesticides, livestock and fisheries.

4. Food safety policy and legislation

As a member of ASEAN and WTO, Cambodia has identified specific strategies to
ensure food security and food safety for all citizens. In 1993 a new system of developing
legislation was introduced in Cambodia. One law framework was established for
management and control of quality and safety of food products, goods and services. This
law only empowers the inspection agents of the Ministry of Commerce (MoC). In
addition, the Ministry of Health has also prepared a draft food law and a number of sub-
degrees were established addressing food safety and good manufacturing practices
(GMP) such as industry standard, food hygiene for human consumption, phytosanitary
inspection, animal health and products derived from animal production inspection and
agricultural materials standard. In addition, there are a number of regulations developed
prior to 1993 such as registration of industrial products, standards for labeling of food
products, standards on general for a model third-party certification system for products
and quality control and safety of food.

The Cambodia National Codex Committee (CNCC) was established by sub-
degree with 8 members. CNCC is considered matters related to policy on safety and
quality products and services, consumer protection and fair trade, and to ensure
coordinating relevant ministries involved in food safety matters. The codex contact point
is located in the Department of Export Inspection and Fraud Repression of the Ministry
of Commerce.

As a member of WTO, Cambodia has prepared an action plan for implementation
of SPS and TBT agreements. Sub-degree No.12 in February 2002 established the
Department of Industrial Standards to ensure the quality of products standards including
foods.

5. Food Safety Administration

Recently, the system of food control in Cambodia is complex, with significant
control exercised such as Camcontrol’s officers of the MoC to inspect import foods at the
point of entry as well as foods exports, and inspect all food in the markets throughout the
country. The Camcontrol activities are focus on preventing the distribution of unsafe, poor quality, adulterated, misbranded or contamination products including foods. The Ministry of Industry is control the quality of manufacturing and quality control of industrial products. They inspect sample of processed foods and undertake microbiological and/or chemical analysis in laboratories on a diversity of products e.g. bottled water, beers, wines, fish and soy bean sauce and vinegar. Before issuing licenses, the results analytical testing should be satisfactory. However, there are no food standards against to interpret the results, Codex standards are applied. There is limited number of national standards have been approved by the Industrial Standards Technical committee.

The Ministry of Agriculture, Forestry and Fisheries (MAFF) has a key role in managing and control safety and quality of agricultural products (raw materials) as they enter the food chain. Inspection of phytosanitary, agricultural chemical residue, animal health and animal sanitation, and agricultural material inputs are needs to be done by MAFF officers. However, some existing products in markets in through the country, movement of animals has not inspected due to lack of capacity and limited legal frameworks to support of this activity.

6. Capacity building of Food Safety in Cambodia

Cambodia legislation does not stipulate training requirement for food inspectors. Some inspectors do not have degree level qualifications and have minimal training in risk-based approaches to food safety. However, some key inspectors, food lab analysis and policy development officers received food safety trainings such as Camcontrol inspectors have received training on quality control of food with assistance of FAO, Inspectors and officers from MAFF, MoH and MIME have received training in HACCP, Good Manufacturing Practices and Food Safety providing by ASEAN Regional Food Safety Program with assistance Guelph food Technology Center of CANADA, IDRC, AVA and Singapore International Programme.

Moreover, the Sanitation and Phytosanitary Capacity programme has been implemented in ASEAN countries including Cambodia with assistance from AusAID. An SPS focal point in Cambodia has been formed and implemented SPS. SPS program is to enhance the capacity of ASEAN focal countries (from MAFF) to meet international SPS standards and requirement of importing countries consistent with WTO.

The main four component will be implemented in SPS program including:
1. SPS-trade linkages: to increase the understanding of, and support for, SPS issues by ASEAN focal countries;
2. Plant health: to build for construction national pest lists and undertaking pest risk analysis;
3. Animal Health: to strengthen regional capacity in SPS measures to control trans-boundary animals and
4. Program management: to manage the program effectively and efficiently.

Cambodia has been also implemented Phytosanitary capicity development project, which undertaking in Cambodia, Laos, Myanmar and Vietnam assistance and support by NZAID project. The main areas of NZAID project is:
- Awareness building programmes for senior managers in the SPS area so that the need for initiating appropriate policy, administrative and
legislative reforms in nodal Ministry (Mainly Ministry of Agriculture) responsible for phytosanitary or plant quarantine;
- Assistance for formulation of vision documents, strategic plans and action plans for phytosanitary capacity development and the formulation of project proposals in an integrated manner so that multiple donor agencies could be involved in development programmes and
- Development of integrated database systems for information management.

7. Foodborne disease surveillance and Contaminant Monitoring

There are several sections with a laboratory in each of the key ministries including National Institute of Public Health and Department of drug and food in MoH, fisheries, agriculture and animal health of MAFF, and laboratories in MIME, MoC and ministry of Environment. In addition there are private laboratories such the Pasteur Institute. However there are limited coordinated programme of food surveillance and little analytical data regarding microbiological or chemical contamination of food.

Food has clearly been implicated in recent outbreak in an outbreak amongst factory workers who consumed contaminated food, and outbreak in May 2001 that occurred in school children with several hundred cases, and outbreak in 2002 associated with consumption of toxic fish.

Furthermore it is integrally involved in the high infection rates associated with trematodes. Despite this foodborne disease surveillance is not actively undertaken and even the reporting of diarrhoeal diseases is not optimal. In 1999, diarrhoeal disease was was the fifth leading cause of inpatient morbidity, with 8701 reported cases, and was the sixth leading cause of population mortality, according for 103 deaths (Anon health 1999).

8. Constraints

Last three decades of civil conflicts, Cambodia has limited economic growth compared to other countries in the region such as:
- Inadequate regulatory and institutional framework on food safety so that its will be less able to meet HACCPP and SPS required for international trade;
- Lack of commitment to SPS issues at senior levels, or and inadequate understanding SPS-trade linkages;
- Poor infrastructures and processing plants, and lack of access to technology and financial capital to invest industry and small and medium enterprises (SME), food control and implementing of SPS and HACCP;
- Poorly developed human capital especially private sectors institutions and skilled workers;
- Lack of coordination within and between agencies who responsible in management and control of food safety;
- Unclear roles and responsibilities (who do what?) of implementing, managing and controlling of food safety issues;
- Lack of capacity including human resources and facilities in food safety management and control, implementing of HACCP and SPS.

9. Conclusion and recommendation

Cambodia is slow developing country in the region. Major problems to further economic and trade growth included macro issues of the global trading system,
weaknesses in legal and institutional frameworks, poor infrastructures, lack of access to technology and financial capital for investment and lack human capacity to manage, control and implement food safety, HACCP and SPS.

For further development and involved in global trade, Cambodia need to be improved the following issues:

- Develop and strengthen the implementing regulatory and institutional framework in food safety, HCCAP and SPS;
- Improve coordination and linkages between relevant agencies with country and in region in implementation and management of food safety, HACCP and SPS;
- Define clear roles and responsibilities of implementing and management of food safety, HACCP and SPS;
- Encourage private investment in food industry, agro-industry with good manufacturing practices (GMP);
- Develop and improve infrastructures of working, processing, services of food safety management and control, and HACCP and SPS implementation;
- Improve the capacity building including human resources, equipment and facilities for implementing food safety include SPS and HACCP.

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