INGSA CASE STUDIES

Amplesia
Addressing childhood obesity between science, economic interests and local knowledge
Background and context

Amplesia is a fast-developing country in Asia; with a population of 5 million; blessed with great weather and beautiful tropical jungles and islands. Urbanization is increasing and the traditional village population shrinking, with about 70% of the population now living in the capital city. The GDP of Amplesia is USD5,900/capita and is rising quite quickly as a result of tourism growth and remittances. The major exports are coconut oil and some low-end watches assembled from imported components (this employs some 5000 Amplesian women in assembly line work, but the company is a sub-venture of a Majorian-based company and it pays very little in the way of tax). The country also receives developmental aid from several countries, but most particularly from Majoria. Majoria is the region’s most populous and economically advanced country, which is home to a considerable percentage of the Amplesian migrants.

However due to rising Majorian nationalism, fewer young Amplesians are able to obtain work visas abroad. Instead, more of them are looking for work at home, largely in tourism, and to starting families; thus the population in Amplesia has been growing steadily. Many of the young adults have no marketable skill sets and unemployment is high outside the tourism sector. Crime is high too. International tourism has brought a growing consumerism, especially in the capital city, which also hosts the only international airport, and in the towns around tourist resorts. Rapid growth of urban centres, poor urban planning with limited public transport and no safe and green spaces, liberalization of car import policies, as well as rise in crime, have made people fearful of outside activities and is resulting in the reduction of physical activity.

In the past, Amplesians suffered from under- and malnutrition caused by food insecurity and parasitic infestations. A previous administration assisted by aid agencies and advised by the WHO and FAO rolled out a “10-Year Plan” to address these problems, using multi-sectoral programmes. So far, the interventions (including fertilizer subsidies, providing farmer education and support, diversification of crops) have almost eliminated famine, severe food insecurity and severe undernutrition. Micronutrient deficiencies have been significantly reduced through supplementation. The prevalence of parasite infestations has been lowered through deworming programmes with some improvement in the nutritional status of all the segments of population.

Yet the arrival of fast food chains, the increased consumption of soft drinks and a decline in traditional fish consumption, much of which is now devoted to export markets, combined with lowered physical activity, have now pushed the balance the other way. Obesity is rising rapidly in children and in adults. According to a survey conducted by a visiting university team, about 35% of children at the age of seven are obese. Heart disease and type 2 diabetes, generally appearing before the age of 50 and sometimes even in teenage years, now confront nearly every family and are overwhelming the national medical services, the latter taking up 5-8%GDP.
A recent report from the Regional Office of the WHO highlights the major problem of childhood obesity of Amplesia. A number of initiatives are now promoted both by the government and by donor countries. Most of these are focused on nutritional education in schools and on promoting physical exercise. The Minister of Health wants to ban fast food outlets from selling to children under the age of twelve and put a tax on sugar sweetened beverages, but there are objections from some families and the powerful owner of the biggest fast food chain.

At the same time, a Majorian company has approached the government to say that it has developed a special diet drink for children that is partly made with soy milk, an Amplesian local herb and molasses. The inventors of this drink, called SMARTKID, have claims that include giving SMARTKID to children from age 3 will reduce the risk of obesity, and that one can of this drink a day is a preferred lunch replacement for maintaining a healthy weight and will help them learn better. The company is seeking a concession from the government to build a plant to make this meal replacement product and to be exempt from taxes and import levies on the import of the other materials for its production and sale. It is anticipated that SMARTKID will cost slightly less than the soft drinks currently available in fast food outlets and the local markets. The company is offering to provide the product at cost to schools and it intends to export it to other countries in the region and perhaps beyond.

Scientists from the local university have recently been made aware of the company’s proposal to the government of Amplesia. They are stating that this ‘milk’ contains large amounts of molasses and thus has a high content of sucrose. The university’s leading nutrition researcher (who is the former graduate supervisor of the current Amplesian Minister of Health) claims it is irresponsible to promote this product as a healthy part of children’s diets. She is pointing out that any health claims for it are not based on any randomised trials and that the label is misleading. The company counters this criticism with the argument that all health claims come from traditional knowledge, because the drink is only a modified version of a recipe that has been given to the children for generations. Furthermore, the government has learned that an international NGO, The International Indigenous Herbal Medicine Foundation (IIHMF) that works in the bio-prospecting space, is giving licensing advice to the consortia of family groups who own the herb plantations.

The Majorian ambassador to Amplesia makes it clear to government members that Majoria would be very pleased if consent was granted and a deal could be reached for distribution of the new diet product in schools. She points out that Majoria is considering building a new airport on the main city, a major highway infrastructure project and tourist hotels. The Deputy Prime Minister, who is up for re-election next year and is also the Minister for the Economy, comes from the region where the herb is grown. The family groups who grow these herbs believe that the price they will get for the raw herbs will double their income. They have made it clear to the Deputy Prime Minister that they expect him to make sure approval is given to approve the SMARTKID diet drink. However there are some urban-based environmental groups who are concerned about the negative effect of increased commercial production of the herbs will have on biodiversity.
The dilemma

The Prime Minister is in a quandary – he knows that obesity is a major issue and is sceptical of the health claims. The Minister of Health is in agreement. She is proposing to introduce mandatory food labelling of all products including natural ingredients, such as the SMARTKID diet drink, and taxing those containing more than 10 grams in 50mls of fluid of sugar, as a way of controlling intake of sugars and providing income to the health sector. But the Minister of Foreign Affairs and Deputy Minister think it is more important to maintain strong relations with Majoria and the new industry could offer valuable opportunities. And the Minister of Culture and Heritage strongly believes that the herbal product should be supported.

You are the scientific advisor to the Prime Minister and Cabinet, a post that has recently been created on a trial basis. The Prime Minister seeks your advice.

What considerations do you need to bear in mind in doing so? Note: this question is not only about making a specific recommendation but rather about the process and considerations in doing so.
ABOUT INGSA

INGSA provides a forum for policymakers, practitioners, academies, and academics to share experience, build capacity and develop theoretical and practical approaches to the use of scientific evidence in informing policy at all levels of government.

INGSA’s primary focus is on the place of science in public policy formation, rather than advice on the structure and governance of public science and innovation systems. It operates through:

- Exchanging lessons, evidence and new concepts through conferences, workshops and a website;
- Collaborating with other organisations where there are common or overlapping interests;
- Assisting the development of advisory systems through capacity-building workshops;
- Producing articles and discussion papers based on comparative research into the science and art of scientific advice.

Anyone with an interest in sharing professional experience, building capacity and developing theoretical and practical approaches to government science advice is welcome to join INGSA. By signing up to the INGSA Network you will receive updates about our news and events and learn of opportunities to get involved in collaborative projects.

Go to http://www.ingsa.org for more information.
Notes for the mentor and for case expansion

Consider the scenario from the perspective of various stakeholders:
- The Prime Minister
- The Minister of Health
- The academic community
- Local/rural groups
- Majorian politicians
- Majorian Industry
- Local industry
- Schools
- Parents and families
- Others

Some considerations might include:

- How to engage with international food and nutrition experts from the academy and industry (how might they be engaged differently and why?)
- Engagement with schools and civil society groups to better understand dietary and exercise practices. Could there be other solutions?
- Communication tools
- Gaining a better understanding of the product. How could it be tested? What criteria would be necessary and what claims could be made? Could it be marketed differently and still be profitable?

Scenario twist:

The Majorian company proposing the manufacture, sale and export of the new product has recently had to recall another product from international sales due to suspected contamination in an aging factory in Majoria. Their international reputation is in tatters, but they are now considering moving all their product lines to a new base in Amplesia if it is approved for construction.