

INGSA CASE STUDIES

AFRISTAN: HEALTH, NUTRITION AND PUBLIC POLICY

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Background and context

Afristan is a country in the Middle East. Geographically, it is divided into three regions with distinct climates and ecosystems: coastal plains, a large mountain range in the western and central parts of the country, and desert in the east. Its historic capital Naavale is located on the central mountain plateau. Traditionally its economy relied on agriculture along the coast and in the mountains (sorghum, vegetables, fruit, more recently coffee, livestock and fishing), but the discovery of rich petroleum reserves in the east and in neighbouring landlocked countries enabled Afristan to benefit through both pipelines and refineries. These developments dramatically increased the national income, and transformed the country. It has further benefited from its reputation as a regional hub for multinational firms and a welcoming place for international businesses.

The increased wealth has led to rapid population growth. The growth has been partially fuelled through immigration, because domestic population could not provide sufficient workforce for extensive infrastructure projects and necessary service (health, hospitality). The population is also growing through natural increase, a result of the combined fall in mortality (through better medical care) and high fertility. The latter is driven by traditional social structures. While women are predominantly educated to high school level, they tend to marry young, have large families and do not participate in paid employment. The current population had grown from 1 million in 1970 to just over 4 million today, and it is predicted to grow to over 6 million by 2040. At the same time, the country leaders are aware of the need to plan for a post-oil future and possibly retracting economy. Afristan has been developing industries such as tourism, logistics and shipping. But with the challenging geography, food and water security remain pressing issues.

The rapid growth of urban centres, an urban planning culture that is centred on cars – due, largely, to low petrol prices - rather than active transport modes, and a harsh climate making outdoor activities difficult for much of the year, have all resulted in very low levels of physical activity. This is doubly true for women, who, for cultural reasons, tend to stay at home and do not engage in sports. Additionally, the arrival of fast food chains, the increased consumption of soft drink, easy availability of imported food, have all increased access to food and caloric intake.

As a result, overweight and obesity is rising rapidly in adults as well as children. The proportion of obesity (BMI>30 kg/m²) in adults is 35%, with women, at 43.5%, having far higher rates than men (29%). Of particular concern is the rapidly growing childhood overweight and obesity. According to a survey conducted by a visiting university team, about 30% of primary school age girls and 22% of the boys 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 is increasingly becoming a burden on the national health services. 24% of pregnancies are complicated by diabetes of pregnancy (compared to 7% in much of Western Europe)

A recent report from the WHO highlights the major problem of childhood obesity and diabetes of pregnancy in Afristan – it has the highest childhood obesity prevalence in the region and one of the highest in the world. A number of initiatives are now promoted both by the government and by international organisations working with the government. Many 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, but there are objections from some families and the powerful owner of the biggest fast food chain.

At the same time, public health authorities are warning that the obesity in children cannot be targeted separately from the obesity in adults, especially women. This is not only because families—and especially mothers—shape food preferences and activities, but because of the developmental effects of maternal obesity, poor nutrition and physical inactivity on the fetus. “To reduce childhood obesity,” the director of Obesity Research Unit at the University of Afristan in Naavale, who is also a member of the WHO Commission on Obesity, wrote in an op-ed, “we must first address the root causes of obesity in women.”

Problem

At the same time, an entrepreneurial natural products company (NPC), from Tangeria, a Western country with close historical links to Afristan, has approached the government to say that it has developed a special diet drink for children that is partly made with milk, a plant extract obtained from an endemic bush, *Banksia afristanis*, that grows only in the Afristan mountain ranges and date sugar. Extracts of *Banksia afristanis* made by boiling the leaves in syrup are used in local tribal medicine and are said to ‘help children grow’. Certainly historical stunting rates in that tribal region are low.

NPC claims that giving this drink to children from the age of 3 will reduce the risk of obesity, and that one can of this drink a day is a preferred lunch replacement for maintaining healthy growth. NPC 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 the final product 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. It is also hinting at moving other of its manufacturing to Afristan if the conditions are right. Last year global manufacture by NPC led to sales of US \$2 billion.

Scientists from the local university, however, have warned the government that this ‘milk’ contains large amounts of date sugar and thus has a high content of sucrose. The university’s leading nutrition researcher (who is the former graduate supervisor of the current Afristan’s Minister of Health) claims it is irresponsible to promote this product as a part of a healthy diet for children. Further, she is pointing out that any health claims for it are not based on any randomised trials and the company’s other products are largely sold as non-proven natural products. A leading Tangerian newspaper recently published an exposé about false health claims on one of its other products.

The company counters this criticism with the argument that all health claims come from the traditional knowledge, because the drink is an artisanal version of the *Banksia afristanis* extract that has been given to children for generations. A visiting European professor of paediatrics points out that any anecdotal evidence that an extract of *Banksia Afristanis* helps children grow is likely simply because it

is high in energy and thus prevented stunting, common in other regions of Afristan until 20 years ago. His statement is criticised by a prominent local doctor who is a strong proponent of bringing indigenous knowledge into Western medicine. At the same time, an international NGO that works in the bio-prospecting space is giving patenting advice to the consortia of family groups who own the land on which the *Banksia* grows.

The Tangerian ambassador to Afristan makes it clear to government members that Tangeria would be very pleased if consent was granted and a deal could be reached for distribution of the new diet product in schools. The deputy Prime Minister comes from the tribe residing in the region where the *Banksia afristanis* is grown. The family groups who grow the plant have stated that the price they will get for the raw leaves will at least double their income as it moves from simply local market sales to being a true cash crop. The tribal leaders have made it clear to the deputy Prime Minister that they expect him to make sure approval is given to approve the diet drink.

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. He is proposing to introduce mandatory food labelling of all products including natural ingredients, such as the “diet drink”, and taxing those containing more than 10 grams of sugar in 50 mls of fluid, as a way of controlling intake of sugars and providing income to the health sector. However, it is important to maintain strong relations with Tangeria. Also, the government is very much aware of the need to diversify the industry and prepare for an oil-free future. Developing agriculture and food production is of particular interest both for economic and food security reasons.

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 are the considerations that you have to take into account when providing this advice?

AFRISTAN

Notes for the mentors and for case expansion

Consider the scenario from the perspective of various stakeholders:

- The Prime Minister
- The Minister of Health
- The academic community
- Women's health researchers
- Local/rural groups
- Tangerian politicians
- Tangerian industry
- Local industry
- Schools
- Women's organisations
- Parents and families
- Others

Some considerations might include:

- How to engage with international food and nutrition experts from academia and industry (how might they be engaged differently and why?)
- Engagement with schools, civil society groups, women's organizations 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?

The image was obtained from:

https://en.wikipedia.org/wiki/Fast_food_restaurant#/media/File:Fast_Food_Restaurant_in_Malinska_im_Hafen.jpg

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- Assisting the development of advisory systems through capacity-building workshops;
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