



“Investing in Africa’s future”

COLLEGE OF HEALTH AGRICULTURE AND NATURAL SCIENCES

NAEC409: AGRICULTURAL POLICY ANALYSIS

END OF FIRST SEMESTER FINAL EXAMINATIONS

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DURATION: 3 HRS

INSTRUCTIONS

Answer all questions in Section A
Answer two questions in Section B

SECTION A

Answer all questions in this section

QUESTION 1

Read the passage below and answer the questions that follow:

Tobacco and the developing world

Around 1.1 billion people aged 15 and over smoke, with 80% living in LMICs (low and middle income countries). Tobacco growing and consumption have become concentrated in the developing world where the health, economic, and environmental burden is heaviest and likely to increase. The cost price of a cigarette fails to take into account the cost of poor health to the individual, the addictive nature of the product and the potential harm to others through passive smoking.

Health Effects

Smoking tobacco harms almost every organ in the body and is the leading cause of preventable death. In 2016, over 7.1 million deaths (12.5% of all deaths) were attributable to smoking worldwide. Smoking causes harm in several ways to both smokers and non-smokers. Second-hand smoke (SHS) also poses grave risk to non-smokers, particularly women and children. In China, up to 75% of pregnant women are exposed to SHS, which can have adverse reproductive effects, decrease infant birth weight, and increase the risk of preterm delivery. Most of the lung cancer deaths due to SHS and indoor air pollution occur in LMICs, particularly China.

Most smokers begin to consume tobacco before the age of 18, and developing countries tend to have much higher rates of adolescent smoking than developed countries. For example, whilst adult smoking prevalence is significantly lower in the Africa region than in the Europe region, the opposite is true for children: smoking amongst 12-15 year olds is around double the percentage in Africa than in Europe. Smokers typically do not fully understand the addictiveness of nicotine when they start smoking. Although selling cigarettes to children is illegal, most smoking starts at a young age, and young people tend to be optimistic about their ability to quit before their smoking becomes problematic. Many young smokers' understanding of the risks of smoking is inadequate for making informed decisions about taking up and continuing to smoke. Many adolescents perceive light smoking, as well as regular smoking in the shorter-term, to be completely risk-free.

Researchers have described several reasons why smokers tend to be ill informed. First, the tobacco industry has a long history of hiding or distorting information about the health risks of smoking and, second, there is usually a long period of time between starting to smoke and the onset of illness. This delay obscures the link between smoking and disease. An additional explanation may be that the declining prevalence of smoking has resulted in fewer individuals knowing someone affected by tobacco-related disease, thus decreasing the salience of smoking risks. Smoking also contributes to poor health as smokers in some of the poorest countries divert money away from nutritional needs to fund their smoking habit.

Effects on poverty

Smoking has been shown to reinforce wealth inequality and poverty. One study found that the poorest households in Bangladesh were twice as likely to smoke as the wealthiest households, and the average male smokers spent twice as much on cigarettes as per capita spending on clothing, housing, health and education combined

Tobacco farming

Although the tobacco industry claims that tobacco farming brings income and economic benefits to developing countries, most of the profit goes to large multinational companies, while many tobacco farmers remain poor and in debt. Furthermore, economic gains from the tobacco industry can be offset by the environmental and public health costs caused by the industry. Child labour is also common in many tobacco-growing countries, although accurate data is scarce because of underreporting and a lack of labour law enforcement. In poor families who depend on tobacco farming, children work on tobacco farms from a very early age with some taken out of school to do so.

Environmental Impact

Over the last 50 years, tobacco farming has shifted from high income countries (HICs) to low and middle income countries (LMICs), partly because poor farmers see it as a cash crop. However, a growing number of studies have documented the widespread environmental damage caused by tobacco farming in the developing world. 5 Tobacco farming and cigarette manufacturing in particular results in large amounts of energy and water use, as well as large amounts of waste generated. Deforestation is one of the largest contributors to carbon dioxide (CO₂) emissions and climate change and at least 200 thousand hectares of forest are lost every year for tobacco agriculture and curing. Tobacco smoking leads directly to the emission of 2.6 million tonnes of CO₂ into the atmosphere. Loss of biodiversity as a result of tobacco-driven habitat fragmentation has been reported in developing countries, such as Zimbabwe and Bangladesh. Tobacco production in LMICs also disrupts natural ecosystems which inhabitants are so dependent on. Unlike many food crops, tobacco offers no replenishment to the soil and the biomass (stalks or plant residue) left after harvest is of no food value to livestock and poultry. Farming tobacco in place of other food crops therefore diminishes animal resources, reducing the animal manure which is essential to maintaining soil health. Cigarette butts, which contain a form of plastic, are also the most littered item in the world and are the number one man-made contaminant in the world's oceans.

Tobacco Industry

The tobacco industry has greatly expanded into LMICs over the last few decades, due to the various opportunities presented there. The global industry is dominated by four privately owned transnational tobacco companies (TTCs) – Philip Morris International (PMI), British American Tobacco (BAT), Japan Tobacco International, and Imperial Tobacco. Because tobacco consumption is falling in most HICs, TTCs have been exploiting opportunities in Asia, Africa, and the Middle East, where consumption has been increasing and where tobacco controls are relatively lax.

Although the tobacco industry claims it markets to existing smokers to encourage brand switching, evidence shows that it pursues marketing tactics to encourage

people to take up smoking, particularly in the developing world. Because smoking rates have historically been low amongst women in LMICs, TTCs have conducted targeted marketing to women by creating more 'feminised' products including cigarette packs resembling lipsticks or perfume, as well as 'light' ultra-thin cigarettes.

The tobacco industry has also been shown to target children. Sub-Saharan Africa's rapidly expanding young population makes it a prime target for the tobacco industry. In many African countries, high numbers of children are offered free cigarettes by tobacco company representatives.

The tobacco industry has actively undermined efforts to implement tobacco control policies through, for example, exaggerating the economic importance of the industry; manipulating public opinion; discrediting scientific research; and intimidating governments through litigation. For instance, Philip Morris and BAT, the two largest tobacco companies in the world, made an agreement with the Ministry of Health in Mexico to help fund medical services to uninsured people in exchange for abandoning tax increases and graphic warning labels on cigarette packages. Tobacco companies are also aggressive litigants, and have brought legal challenges against many LMICs' efforts to curb the burdens of smoking – examples include Sri Lanka's efforts to increase the size of health warnings; efforts to restrict public smoking in Kenya and Uganda; and controls on tobacco marketing in South Africa and a number of South American countries.

- a) Identify and describe two types of market failure in tobacco production. (6 marks)
- b) What can African governments do to address the 2 types of market failure you mentioned in (a)? Justify your choices. (6 marks)
- c) Identify and describe four types of market failure in tobacco consumption. (12 marks)
- d) What can African governments do to address the 4 types of market failure identified in (c)? Justify your choices. (16 marks)
- e) Name two criteria that will you use to choose among the policies you recommend. (2 marks)
- f) Which policy making approach should the African governments use? Justify your response. (2 marks)
- g) With the aid of a diagram describe the policy making process. (6 marks)

SECTION B

Answer any two questions

QUESTION 2

A research study in Kenya found that many products sold in the local markets have high levels of pesticides with harmful active ingredients. Kenya's Plant Health Inspectorate Service indicated that 46% of the fresh vegetables sold in Kenya had high levels of pesticides with harmful active ingredients, kale (a leafy green vegetable) (94%) being the leading culprit. Pesticides are potentially toxic to humans and can have both acute and chronic health effects, depending on the quantity and ways in which a person is exposed.

Every year, due to stringent measures by the European market, fresh Kenyan produce is rejected because of harmful levels of chemical residue. Unfortunately, much of this produce then finds its way into local fresh produce markets and is consumed by unsuspecting Kenyans. In order to address this problem Kenya has introduced a policy, which requires testing of all fresh produce for pesticide residue. The policy requires all vegetables, fruits and beans to be subjected to the same quality standards as those going to export markets before they are placed on the shelves. Under these new standards, the produce will be tested twice for quality at the source and at the supermarket before they are offered to customers.

Supermarkets Naivas and Carrefour have already agreed to be used in the pilot phase before the policy took effect. The Fresh Producers Consortium of Kenya (FPC) with other government institutions -including the Kenya Plant Health Inspectorate Service (Kephis)- will follow up on the matter to ensure compliance. All retailers will have to obtain fresh produce permits from the Directorate of Horticulture. Failure to comply with the requirement on quality will see the licenses of culprits revoked and would have to undergo the process of compliance in order to get their permits back.

Use the GRADE framework to analyze this policy. (25 marks)
Your response should be in essay format with subheadings for the GRADE framework.

QUESTION 3

- a) List 8 challenges faced by the agricultural sector in Zimbabwe. (8 marks)
- b) You have been hired as a policy analyst and have been asked to recommend a set of 10 policies to address the challenges identified in (a). Justify why you have chosen each policy you mention. (17 marks)

QUESTION 4

You have been asked by the government official from an African country to prepare a policy memo on urban agriculture comparing alternatives and making recommendations on how the government can address challenges associated with the issue. Your response should be 2-3 pages. (25 marks)

END OF EXAM