



“Investing in Africa’s future”

COLLEGE OF HEALTH AGRICULTURE AND NATURAL SCIENCES

NAEC504: ADVANCED AGRICULTURAL POLICY ANALYSIS

END OF FIRST SEMESTER FINAL EXAMINATIONS

NOVEMBER 2021

LECTURER: DR K. MUKUMBI

DURATION: 5 HRS

INSTRUCTIONS

Answer **ONE** question

All questions carry equal marks (100).

QUESTION 1

Read the passage below and answer the questions that follow.

a) Read the passage below and answer the questions that follow.

In the Indian state of Punjab, farmers are provided with electricity for free, which is part of the reason for widely adopting water-intensive crops, especially rice. This has severely reduced groundwater resources since the 1970s, with an especially rapid decline over the past two decades. According to government estimates in 2013, the state of Punjab used much more water than has been naturally replenished, as the rate of groundwater extraction was 149 percent the rate of natural recharge $\frac{3}{4}$ the highest across all Indian states. As water resources deplete, farmers require ever more energy and financial support to maintain the same levels of productivity, leading the government to increase subsidies for electricity. Rapid year on year increases in subsidy handouts are evidently unsustainable in the long-run and limit the ability of the state to invest in other sectors. Today the state's power distribution company has about US\$ 3 billion in outstanding debt, and since the state bears the cost of every unit of power, costs are controlled by rationing to 4 to 8 hours per day.

Despite these problems, it is also the case that many small farmers in Punjab would not be able to profitably carry out agriculture without these subsidies. And for many large farmers, this type of regressive subsidy implies very large transfers from the state. Taken together it is unsurprising that farmer unions, such as the Bharatiya Kishan Singh (Indian's Peasant's Union), have opposed charging for electricity. Given these facts, the Government of Punjab is considering alternative options that are both acceptable to farmers and would reduce ground-water use and encourage crop switching.

Providing free energy to farmers may improve agricultural outputs but may also change how farmers use energy, leading to overuse. Consequently, this policy may have adverse effects on the environment and ultimately harm the intended beneficiaries, i.e. farmers, by depleting natural resources, while also straining public finances. Nonetheless, as long as electricity is free, farmers may still benefit from and resist changes to the policy.

- i. Use the GRADE framework to analyse the free electricity for farmers policy (25 marks)
- ii. Provide 5 policy alternatives that address the issue of energy for farmers and that would be acceptable to farmers and would reduce ground water use and encourage crop switching. Justify each choice. (25 marks)

b) Read the passage below and answer the questions that follow.

You have been asked to develop an agricultural marketing policy for a province of your choice e.g Manicaland. Your response should include the following

- a) Description of the problem(s) to be addressed (10 marks)
- b) Identification of 4 types of market failure (8 marks)
- c) A list of 5 policy objectives (10 marks)
- d) Description of 4 policy alternatives and their justification. (16 marks)
- e) Which 3 criteria will you use to select among the policy alternatives? (6 marks)

End of Question 1

QUESTION 2

Read the passage below and answer the questions that follow.

a) Donkey skin ruling a 'massive blow' for Kenya's smallholder farmers

By Sara Jerving / 13 May 2021



The overturning of a ban on donkey slaughter in Kenya is a “massive blow” for smallholder farmers, advocates say.

Demand for the animals’ skin in China has led to rampant donkey theft in Kenya _ with some thieves leaving behind only bare carcasses after raids on smallholder farms. In February 2020, Kenyan farmers were given much-needed relief when the government banned the killing of donkeys for their skin. But last week, that ban was lifted following a challenge in court from a slaughterhouse.

“This is a massive blow for donkeys, animal welfare, and especially for the hardworking people who rely on donkeys to earn a living and provide for their families. This trade has had a horrific impact on them, with donkeys being stolen and sold to these slaughterhouses,” said Raphael Kinoti, regional director for animal charity Brooke’s East Africa program.

Why it matters: An estimated 10 million people East Africa rely on donkeys to support their livelihoods, according to Brooke. That includes smallholder farmers who can’t afford mechanized equipment and who use donkeys for heavy lifting to cultivate land, transport hay and silage, and haul water and firewood. Experts say donkey theft has had a huge impact on livelihoods. Given the animals’ use in tasks such as

collecting water and carrying goods from the market, some are concerned about the increased burden on women as well.

What's the backstory? Kenya has become a center of the donkey slaughter trade, with their skins used for producing “ejiao” — a traditional Chinese medicine intended to prevent the effects of aging and increase libido. China doesn't have enough donkeys to meet demand, and breeding large numbers is difficult. When Kenya's donkey abattoirs were active, they slaughtered an estimated 1,000 per day. Some of those animals were stolen. Over 4,000 donkeys were reported stolen in Kenya between 2016 and 2018, according to the Kenya Agricultural & Livestock Research Organization, but the issue is likely underreported. Farmers have also said they were coerced into selling their donkeys. Donkey owners in some areas are protesting the court decision.

Kenya court rescinds ban on sale of donkey meat

The High Court in Kenya has cleared the way for the slaughter and sale of donkey meat. A ban had been imposed on the slaughter of donkeys for their meat in 2020.

But a slaughterhouse and a section of herders challenged the ban in court, saying that they were losing revenue. “The government has failed to sufficiently defend this case and this court quashes the Legal Notice 63 of 2020 as it violates the rights of Star Brilliant,” said Justice Richard Mwongo in his ruling. “The legal notice violates the rights of the applicant under Article 47 of the Constitution and the applicant is granted a stay to operate in light of the failure by the respondent to file back his response,” he said. There are four licensed abattoirs slaughtering at least 1,000 donkeys every day in Kenya.

The east African country's Agriculture ministry imposed a slaughter ban citing the dwindling numbers of the animals. Kenya has about 1.2 million donkeys compared with 1.8 million a decade ago, according to government figures. There is high demand for donkey skin in China where it is used in the manufacture of traditional medicines. The value of an adult donkey more than tripled in Kenya, with some slaughterhouses buying the animals from neighboring Uganda. The surge in prices has also been blamed for the rise in cases of donkey thefts.

Kenya's population of donkeys is under threat after the High Court lifted a 2020 ban on donkey slaughterhouses, allowing them to resume selling the meat and hides to Asian markets. The high price for donkey hides for use in Chinese medicine has led to donkey poaching and sparked fears the animals could eventually go extinct.

Kilena Simeon, a Masai farmer living in the border county of Kajiado, drives her herd of donkeys in search of pasture. For years, she says, women like her have relied on the donkeys to ease the burden of labor in their homes and on their farms. “We get our earnings from our donkeys. We use them to help us in our work. We fetch water with them, we carry luggage, we fetch fodder for our calves, and sometimes we sell them to earn money to educate our children,” she said.

This reliable source of labor is now under threat once again. In early March, Kenya's High Court lifted a ban on the slaughter of donkeys for both meat and hide for

medicine in the Asian market. Donkey slaughter was legalized in Kenya in 2012, leading to a rapid decimation of the animal's population and cross-border theft. Josiah Ojwang, the program's director for the African Network for Animal Welfare, says these developments are likely to reoccur.

"There were many issues that were coming up of donkey theft, of slaughtering of underage donkeys, of cross-border smuggling of donkeys, but most importantly, communities were losing their livelihoods, because abattoirs were slaughtering very many donkeys a day, much more than naturally the donkeys can replenish," Ojwang said.

The Kenya National Bureau of Statistics said in 2019 that the country's donkey population had decreased over the previous 10 years, from 1.8 million donkeys in 2009 to 1.17 million in 2019. Ojwang says this figure is expected to decline even further with the renewed slaughter of the most significant and profitable domestic animals in Kenya.

"These slaughterhouses were slaughtering about 200 donkeys a day, sometimes 250, but they have an installed capacity of about 1,000, so if you look at even our country's population, if they continue slaughtering at that rate, which is too high, it will be a few short years before the population of donkeys in Kenya gets almost decimated," he said.

Kenya has four donkey abattoirs spread across four counties. The four haven't resumed operations yet, as they are waiting to get approved by the licensing authorities. When that happens, activists say, donkey numbers will resume their downward slide, presenting a real problem for rural women of the country and the region.

- i. Use the GRADE framework to analyse the lifting of the donkey slaughter ban. (25 marks)
 - ii. Recommend 5 policy alternatives that address the problems and that would be acceptable to farmers, abattoirs and animal welfare activists. Justify each choice. (20 marks)
 - iii. Present your case to the Ministry of Agriculture of Kenya with arguments for adopting a gendered approach and for promoting gender equality in the countries donkey slaughter policies. Your response should be in essay format (2pages). (20 marks)
 - iv. Is there a need for the Kenyan government to be involved in donkey slaughter and trade issues? Explain. (10 marks)
- b) Identify and describe 3 types of market failure associated with tobacco production. (6 marks)

- c) Identify and describe 2 types of market failure associated with tobacco consumption. (4 marks)
- d) What can the government do to address the 5 types of market failure identified in (c)? Justify your responses. (15 marks)

End of Question 2

QUESTION 3

a) Read the passage below and answer the questions that follow

Billions spent on ads encouraging minority youth to drink sugar-laden beverages despite health consequences

By Sandee LaMotte, CNN

Updated 1321 GMT (2121 HKT) June 23, 2020

(CNN) People of colour are dying from COVID-19 in America in shocking numbers, victims to a disease that attacks those in poor health the hardest.

This disparity is part of the systemic racism that has driven many protestors to the streets over the last few weeks, flaming with anger over the injustices of police brutality and social inequities.

Back at home, they returned to the barrage of ads on television and social media designed to entice them to drink sugary beverages, a leading cause of obesity, type 2 diabetes and heart and kidney disease -- the very conditions that put minorities at high risk of dying during the pandemic.

"If Covid-19 teaches us anything, it's that this kind of marketing has to be stopped," said nutrition researcher Marion Nestle, who has authored numerous books on food marketing, including 2015's "Soda Politics: Taking on Big Soda (and Winning)." Yet the amount of money spent on such advertising exceeded a billion dollars in 2018, according a new report released Tuesday from the Rudd Center for Food Policy & Obesity at the University of Connecticut entitled Sugary Drinks FACTS 2020.

A billion dollars in one year

"Beverage companies spend a tremendous amount of money on marketing for one reason -- it works," said Sara Ribakove, a policy associate at the Center for Science in the Public Interest, which published a scathing analysis of beverage marketing tactics in 2013. "Targeted marketing, spread across various platforms such as websites, apps, television and others, contributes to and exacerbates health disparities," said Ribakove, who was not involved in the RUDD study.

A 12-ounce cola drink has about 39 grams of sugar -- so just one soda provides more than the recommended limit - less than 25 grams of sugar a day. While sports drinks have less sugar, about 21 grams, that's still a day's allowance and the drinks have been linked to obesity, type 2 diabetes and cardiovascular disease. What about the need for sports drinks to replenish electrolytes like sodium and potassium after a workout? That is a myth when it comes to most of us, experts say: Only extreme

athletes need that sort of hydration. The rest of us do just fine with water. Energy drinks, while sporting much less sugar than their rivals, contain potentially dangerous stimulants such as caffeine, guarana, taurine, ginseng, l-carnitine and creatine. They have been linked to anxiety, dehydration and other serious side effects in youth. There have even been deaths among youth with underlying heart conditions.

Targeting the young

Black and Hispanic youth, who have higher rates of sugary drink consumption than non-Hispanic White youth, were often the primary targets of advertising campaigns, the study found, especially for regular non-diet soda, sports and energy drinks.

"Black kids are seeing more than twice as many ads than White kids see," said study author Jennifer Harris, a senior research adviser for the Rudd Center for Food Policy & Obesity at the University of Connecticut. "Sugary drinks are some of the most frequently advertised products on Black targeted television," Harris said, adding that marketing dollars on Spanish-language television rose to \$84 million in 2018, an increase of 80% since 2010. "This is about profits," said health inequity researcher Lori Dorfman, an associate adjunct professor of health and social behavior at Berkeley Public Health in California, who was not involved with the study.

"Soda companies target kids of colour because that's where the growth market is but also because they are cultural trendsetters so they shape the White youth market too," Dorfman said.

"The youth market is important because the brands kids become loyal to as children stay with them through adulthood and become what they bring home to their children," she added.

"We know that sugary drinks contribute to life-shortening chronic diseases like diabetes, heart disease, fatty liver disease, and obesity," said American Academy of Pediatrics spokesperson Dr. Natalie Muth, lead author of the AAP's policy statement on sugary drinks. "The fact that so much money is spent to get minority teens hooked on these drinks is reprehensible and more needs to be done to stop it," Muth said, adding that AAP recommends an "excise tax should be placed on these drinks and the proceeds committed to efforts to improve health equity and reduce disparities."

Using youth idols

The RUDD report found that sugary drink advertising was primarily driven by Coca-Cola and PepsiCo brands, including Coke, Gatorade, Powerade and Mountain Dew. PepsiCo increased their sugary drink advertising by 28% from 2013 to 2018; Coca-Cola spending increased by 81% during that time period as the two giants battle for control of the market. The campaigns often used Black and Hispanic celebrities and sports figures that youth idolize to carry the message, the report said. Many such

campaigns continue today. Mountain Dew, owned by PepsiCo, ranked first in numbers of ads viewed by youth. Most of the campaigns feature sports celebrities such as "The Dew Team" extreme sports and rock concerts, among other teen-oriented appeals, the report said.

Locked in a battle for sport drink supremacy, Coca-Cola focused on the Hispanic youth market with Powerade. The brand also receives endorsements from the US Women's National Soccer Team and promotes young women athletes with their "Power has no Gender" campaign.

The second biggest spender was PepsiCo, spending \$134 million in 2018 to market Gatorade, mostly to Hispanic and Black youth, the report found. Gatorade ranked third in ads viewed on Spanish-language television, and Black teens saw 2.8 times as many ads for the brand as White teens.

Gatorade has contracts with such major athletes as Michael Jordan, Mia Hamm, Peyton Manning and Serena Williams. The brand also sponsors promotions aimed at high school athletes, including Gatorade's "Player of the Year" awards honouring high school athletes from all sports.

"When we've done focus groups with Black and Hispanic kids, they love those Gatorade ads. They are so inspirational and so they're very effective," Harris said. None of this is new, of course. It's common for food and beverage companies to leverage the influence of sports figures and other celebrities "to promote unhealthy food and beverage products to young people and communities of colour," said Omni Cassidy, a postdoctoral fellow in the department of population health at NYU Langone Health, who has researched the role of music and sports celebrities in childhood obesity.

The millions of dollars offered by these companies is difficult for anyone to turn down, especially athletes of colour who want to give back to their communities with their earnings, "even if consuming the food and beverage does not align with sports figures' own values and lifestyle," said Cassidy, who was not involved in the RUDD study.

"We want celebrities to be visible role models for kids — especially for youth of colour — but celebrities' influence can become problematic when they promote products that put youth at risk of diabetes and heart disease," Cassidy added. Experts say soda companies have also taken a page out of the tobacco industry's marketing playbook, by providing funding for many Black communities and endeavours "in ways that don't look like advertising, like funding playgrounds in minority neighbourhoods, minority community groups, and sponsorship of Black and Hispanic sports figures," said Marion Nestle, who also authored "Eat, Drink, Vote: An Illustrated Guide to Food

Politics." "These work," Nestle said. "Minority kids identify soda brands with sports figures, and minority community groups find it hard to oppose soda company marketing when the companies have been so generous."

A public commitment

Major beverage companies say they are committed to reducing the impact of their products on the health of the nation. Coca-Cola, PepsiCo and Keurig Dr Pepper belong to the Balance Calories Initiative. Organized in 2014, BCI is a pledge to reduce the amount of calories Americans consume from sugary beverages by 20% by 2025.

In a press release, Coca-Cola calls it "the single-largest voluntary effort by an industry to help fight obesity." The company points to smaller "mini-cans" and 8 oz. bottles and an "expanding portfolio of low- and no-calorie beverages -- from Unsweetened Gold Peak Tea to Powerade ZERO to Diet Coke" as examples of success in reducing sugar in drinks. Coca-Cola spokesperson Ann Moore told CNN via email that, "At the Coca-Cola Company, we agree that too much sugar isn't good for anyone, and we are taking steps throughout the world to help people reduce the amount of sugar they consume from our products.

"In recent years, we have been aggressively changing recipes to reduce added sugar and promoting low- and no-calorie beverage options. In fact, in 2019, we removed 350,000 tons of added sugar globally, on an annualized basis, through product reformulations."

Then why the need for a billion dollars in advertising, study author Harris counters.

"Regular soda advertising has gone up by 41% over the past five years while beverage companies are talking about all the diet and lower calorie products they're introducing," she said.

"I find it outrageous they can spend that amount of money and at the same time say they're trying to encourage people to make better choices. Our report shows they're not putting their money where their mouth is," Harris said.

Last week, PepsiCo CEO Ramon Laguarta published an op-ed in Fortune Magazine in response to the protests surrounding the deaths of George Floyd, Breonna Taylor, Eric Garner, Philando Castile, Alton Sterling, Delrawn Small and so many more. "Black Lives Matter, to our company and to me," Laguarta wrote. "We have been thinking hard about how PepsiCo can help dismantle the systemic racial barriers that for generations have blocked social and economic progress for Black people in this country."

Laguarta went on to pledge more than \$400 million over five years to "lift up Black communities and increase Black representation at PepsiCo." "The great irony of Ramon Laguarta's promises to counter PepsiCo's conscious or unconscious racist practices in the company, its business, and communities is that none of them addresses targeted marketing," said Nestle. "The best thing Pepsi could do to improve the health of its customers would be to stop advertising and marketing to children and teenagers, especially those of colour," Nestle added. Public health experts of colour CNN spoke to agree.

"For sugary beverage executives to assert that 'Black Lives Matter' at the same time as their companies are aggressively targeting Black kids and teens with ads for their nutrient-free, high sugar beverages is at best, hypocritical and at worst, a diversion from real harm," said Dr. Rhea Boyd, a California paediatrician who teaches nationally on the relationship between structural racism, inequity and health.

"If beverage companies want to seriously assert that Black Lives Matter, they would stop bombarding Black and Latino kids and youth with ads for their unhealthy products," Boyd added. Instead, companies should "promote more images of these communities consuming foods and beverages that are more in line with good health and wellness," said NYU Langone Health's Cassidy. "The world is opening its eyes to structural racism, and everyone is watching how companies respond," Cassidy said. "Will they think it's sufficient to publish op-eds and press releases about diversifying their workforce and stop there? Or will they take it a critical step further and stop making Black and brown communities sick by promoting unhealthy products to youth of colour?"

PepsiCo provided the following statement to CNN: "PepsiCo has strong global commitments on responsible advertising to children of all races, in all communities. We were one of the first companies to articulate a policy on marketing to children and we are constantly auditing our efforts to ensure we are upholding our rigorous marketing standards while also showcasing the full range of our products."

What should be done?

Music, movie and sports figures of colour need to play a role as well, Cassidy said. "It would be great if celebrities could use their star power to push for healthier product promotions when negotiating endorsement contracts," she said. If stars of all races and ethnicities would promise to not promote unhealthy products to kids, then companies could be forced to change, Cassidy added. "We saw this stance happen with tobacco, where almost no athlete would touch a tobacco endorsement."

The need for policy initiatives are made more urgent due to the disproportionate effects of Covid-19 on Black and Latino communities, the report said. "As our country strives to make changes to improve health equity, it should become clear that targeted marketing to get Black and Hispanic children and adolescents hooked on sugary drinks is unacceptable and must stop," said the AAP's Muth. Dorfman is more blunt: "If the companies were serious about protecting Black lives — instead of profiting off of them — they could revamp their products and stop intensively marketing sugary drinks. It's as simple as that."

- i. Identify and describe five types of market failure in sugary beverage consumption. (15 marks)
- ii. What can the US government do to address the 5 types of market failure identified in (c)? Justify each response. (15 marks)

b) Read the passage below and answer the questions that follow.

You have been asked by the African Union to develop an agricultural marketing policy for the African continent. Your response should include the following

- i. Description of the problem(s) to be addressed. (10 marks)
 - ii. Identification and description of 4 types of market failure. (8 marks)
 - iii. A list of 5 policy objectives. (10 marks)
 - iv. Description of 5 policy alternatives and their justification. (16 marks)
 - v. Which 3 criteria will you use to select among the policy alternatives? (6 marks)
- c) Present your case to the AU with arguments for adopting a gendered approach and for promoting gender equality in the agricultural marketing policy for Africa. Your response should be in essay format (2pages). (20 marks)

End of Question 3