

Geography report - Mugdha Vasishth

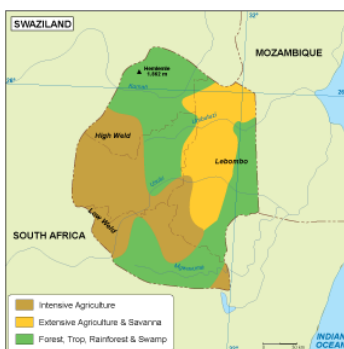
To his Royal Highness, the King of Eswatini,

In this brief paper, I have tried to articulate my understanding of the agricultural sector of Eswatini, and the unique economic and social challenges faced by your country and potential solutions to reinvigorate the growth of agriculture while creating sustainable employment opportunities for a greater share of the population. We believe that subsistence intensive agriculture with some refinements could offer the right solution and this paper would elaborate on our reasoning and the details of this proposal.

Background

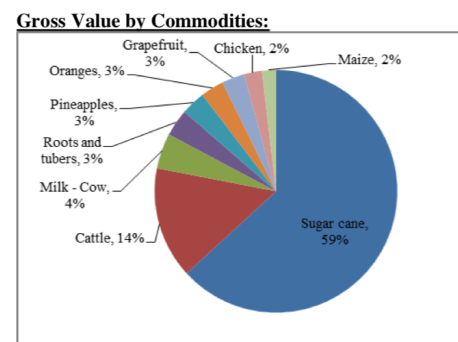
The Kingdom of Eswatini, traditionally known as Swaziland, is a unique country. A landlocked nation, it is one of Africa's smallest countries with an estimated population of 1.39 million. The economy is highly dependent on agriculture with farming employing 75% of the population but accounting for only 6% of the GDP. The local economy combines large-scale intensive production and small-scale semi-subsistence practices. This creates great disparity in general profits earned as well as in lifestyle standards.

A mixture of subsistence and commercial farming is practiced in Eswatini. Major commercial agri-exports are sugar, beef and forest produce. The largest agro-industry is sugarcane cultivation and sugarmanufacturing. Unbleached wood pulp (pine and eucalyptus) is the country's second largest export after sugar.

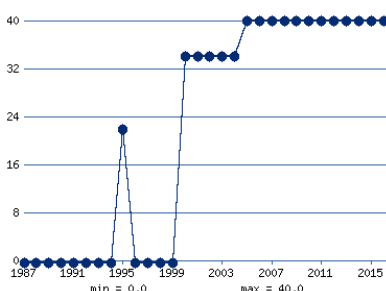


Distribution of agricultural practices

The main crop harvested and an essential cereal food for the Eswatini population is corn. Other major crops include sorghum (mainly for the brewing of traditional beer), pineapples, oranges, grapefruit, pumpkins, beans, peas, and other vegetables. Yields from crops are generally low, but there are examples of high yields from subsistence farmers par with the large-scale commercial sector.



The smallholders own 80 percent of the cattle population. 'Domestic milk production is increasing and beef, tinned and frozen, is exported to the EU and South Africa'¹.



Unemployment rate across the years

Overview of problems

The country faces problems of shortage of professional labor and increasing rates of unemployment, food insecurity, poverty and also has the highest HIV/AIDS prevalence rate in the world. Families from rural areas that participate in non-commercial farming are the poorest, followed by self-

employed headed households. Weather conditions, inefficient farming methods and lack of arable land exacerbates food insecurity.

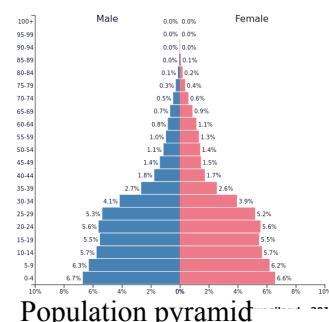
Introduction to subsistence intensive agriculture

The purpose of intensive subsistence agriculture is to yield maximum crops and gain a high output per unit of land with a relatively low output per worker. It is more advanced than primitive agriculture that occurs in provincial areas and combines elements of subsistence and commercial agriculture. During recent times, this form of agriculture has witnessed a noticeable improvement in the machinery and equipment it employs, use of seeds and fertilisers and other modern systems of agro sciences. This form of agriculture is frequently practiced and executed in densely populated countries like India, China, Pakistan, Korea and insular parts of south east Asia.

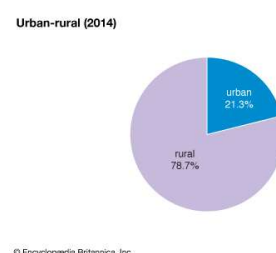
Proposal for subsistence intensive agriculture in Eswatini

Any solution for Eswatini needs to achieve three key outcomes

- Create large scale employment while accounting for the fact that majority of local population is very young and local working labor would be dominated by women
- Build an environmentally sustainable solution to help address challenges of worsening soil quality and lack of access to water sources (lack of rivers in a landlocked country, frequent famines etc)
- Create a solution that builds off on experiences of local rural cultivators



Out of two possible options of commercial farming and subsistence intensive agriculture, large scale adoption and improvement of subsistence agriculture is a much more achievable task. Farming employs 75% of the population of this country, and farmers are accustomed to their traditional farming methods. Introducing commercial agriculture will greatly affect this culture whereas subsistence intensive agriculture simply requires them to improve their methods instead of having to acquire completely new techniques and work with new machinery.

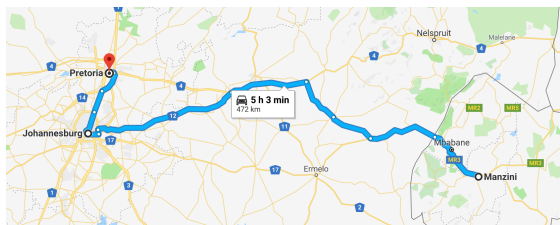


Commercial farming is performed on a large scale and requires labor, advanced irrigation systems, warehouses, and machinery. We need to ensure that the mechanization doesn't replace farmers and further exacerbate the issue of unemployment. Large scale water management and irrigation would also be hard considering there are no major sources of water in the landlocked country. Commercial farming requires deft irrigation management and consumes lot of water which can also be quite expensive. For a landlocked country like Eswatini, abstaining this much water will be an extremely difficult and tedious task to implement.

It is also vital that we consider the socio-economic impact of commercial agriculture on rural farmers. It would also be slightly quixotic and untrue to the culture of Eswatini to completely

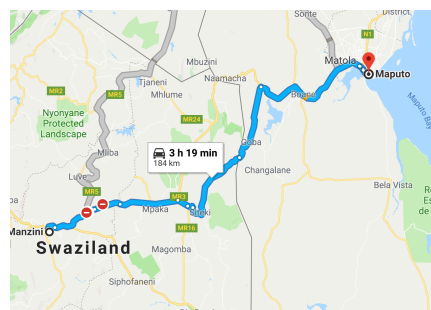
transform the provincial landscape and expect them to emerge out of their current subsistence based agricultural society.

Through subsistence intensive farming, cultivators will be able to produce enough food to sustain their own families and also actively participate in the market, ensuring food security for a large amount of the population.



The question remains how do we make this farming sustainable both from an environmental as well as commercial perspective. As a landlocked country, Eswatini has a unique geographical advantage. Manzini, the main city, is located approximately four hours driving distance away from three key commercial centers

in the countries of South Africa and Mozambique, namely Johannesburg, Pretoria, and Maputo. The Eswatini farmers can position themselves as the key providers of fresh daily produce for these large and growing urban areas which have a large middle class and affluent population. To differentiate their products, they can focus on wide spread adoption of organic farming and build a reputation for high quality, eco-friendly produce.

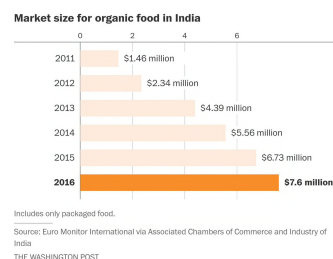


This option is economically viable as it doesn't require fertilisers and a profitable industry as organic products have gained immense popularity due to their natural and chemical free production. The demand for organic food is higher than the supply, leading to increased price rates. It is also a very sustainable agricultural practice since it rebuilds soil health, recycles farm nutrients and reduce pollutants which will help resolve the prevalent problem of soil degradation in Eswatini's farming lands. It will also create countless amount of job opportunities that can help mitigate the growing issue of unemployment. Organic farming does possess a special job-creating ability as it is more labour intensive as compared to conventional farming. A US study found out that organic farming is '22 percent and 35 percent more profitable for farmers than conventional farming'.

The profits made can be directed to improving life standards of the rural population and the population's exigencies such as establishment of healthcare facilities and schools since smallholders have shown a growing interest in receiving basic education (literacy, numeracy, health education, etc).



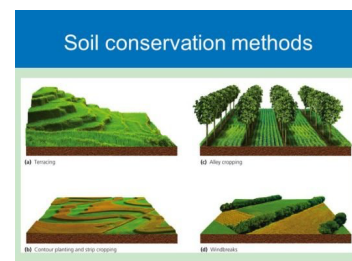
Eventually, the entire country can move towards organic farming and brand itself as an organic-only region. There are numerous examples that demonstrate the success of this approach such as the Indian state of Sikkim,



which banned pesticides and switched to organic farming, and is being paraded as a paradigmatic of modern agriculture.

Implementation

Organic farming is a new concept and we will need to create basic awareness about the underlying agricultural practices, methods and required equipment. Along with farming methods, basic strategies such as avoiding crop rotation and monoculture can be encouraged to increase crop yields and improve soil conservation as well as livestock management.



This strategy would also necessitate investment in logistics to create chain for daily supply of fresh produce to key urban centres. Investment in packaging (indicating organic produce) as well as marketing of Eswatini's quality would also be necessitated and can be supported by the government.

In all these efforts, we can have women entrepreneurs at the forefront to ensure their socio-economic integration. In the medium term, we need to ensure that there is enough land to cater for the needs of the farmers. We need to form additional land pools by draining swampy areas, irrigating drier areas and terracing hill slopes.

Conclusion

In conclusion, Commercial intensive would be cost effective and economically viable. Participating in organic farming will lead to a more sustainable solution with higher employment rates and profits and can help ameliorate the general lifestyle of the people. It will also provide the country with a unique brand. We will finally be able to introduce productive smallholder agriculture to the existing dynamic commercial market-oriented environment and allow the two to amalgamate without disturbing the rural farmers' agricultural routine and practices.

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¹ Masson, John Richard. "Eswatini." Encyclopædia Britannica. October 30, 2018. Accessed October 19, 2018. <https://www.Britannica.Com/Place/Eswatini>.

Student reflection

This assessment helped me develop my critical thinking skills and enhance my problem-solving abilities. I improved my knowledge of agricultural methods and was exposed to real life issues that are faced by countries like Eswatini and think deeply about how we can tackle them.

I think my report's strength lies in the solutions I have proposed which are well reasoned and researched and discussed in depth. I'm happy with the way I've presented and organised my work which is usually my weakness. I have used limited diagrams but they are resourceful and supplement the information well.

To improve, I could dive into more detail in the implementation section, possibly elaborating more on strategies the country can use to tackle their farming problems such as soil degradation and poor management of livestock. Overall, in this assignment I could improve on planning. I missed a lot of lessons due to my trip to India and struggled to effectively manage my time or create a plan.