

NATIONAL UNIVERSITY OF LESOTHO

FACULTY OF HUMANITIES

COMMUNICATION AND STUDY SKILLS UNIT

ELG1301 – COMMUNICATION AND ACADEMIC LITERACY FOR AGRICULTURE

JANUARY 2024

MARKS 100

3 HOURS

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INSTRUCTIONS:

- Write **YOUR STUDENT NUMBER** and **GROUP BOLDLY** on the cover of the answer folder.
 - Answer **ALL** questions.
 - Write legibly.
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QUESTION 1

ESSAY WRITING

Read the passages below and write a DESCRIPTIVE ESSAY based on the following title:

Challenges Facing Agriculture in Lesotho

- **Length of the essay – 1 ½ - 2 pages**

Note:

- i. Select relevant material from the following passages.
- ii. Include direct quotations (only 2) and indirect quotations in your essay.
- iii. Marks will be awarded for the following:
 - Appropriate content
 - Effective paragraphs
 - Relevant quotations
 - Correct grammar and spellings

- Academic style
- Appropriate cohesive devices
- Complete bibliographic entries

[60 marks]

Passage 1

The Processes of Impoverishment

Recently, livestock theft has become one of the major factors leading to poverty in the mountain areas. Until the drought broke this year, drought, not just in the mountain areas, was one of the significant causes of poverty. If one were to list the causes of poverty according to priority, the list would be: loss of wage employment, loss of livestock, ill health or death of breadwinner, crop failure, and aging of the household head. It should be noted that in some cases the cause of poverty will be a combination of factors and the setting in of other problems such as alcoholism and marriage breakdown.

The following case best illustrates the process of impoverishment: The couple married in 1966 when the husband was a migrant worker in the mines. While he was in the mines he bought animals which were stolen and the few that remained were sold to cover household needs and some died because of poor management. The husband left work in 1979 due to illness and died in 1995 after a long period of illness which cost the family all its savings and sunk it into debt. The eldest child is a girl who has been married into another household and the son is 19 years and in school. The other children are girls who the mother does not expect much from. The mother is doing odd jobs to get money to feed the children and cloth them. The household has only 30 chickens and 1 field that it shares crops with other families; the total produce from the field that came to the household last season was eight bags.

In some cases, the husband goes to work in the RSA and does not come back leaving the wife to look after the children. To be able to support the children the wife has to seek employment and leave the children with the grandparents. The death or ill health of grandparents makes it difficult for the woman to continue to work and she often has to go back to the village to look after the household and the children. Beer brewing becomes the major source of income.

The following cases illustrates the process of upward social mobility: The couple married in 1947 and at that time the husband was a civil servant in Lesotho. The couple stayed with the parents in law of the husband until they could build their own house. The couple only had 1 daughter who got married and left the family and later brought some of the children to stay with her parents. In 1969, the husband retired from the civil service but had short-term contracts in various departments. Although the couple had some animals, the husband inherited more when his father died in 1984, this brought the household animals to 21 cattle, 20 sheep and 3 horses.

Source: Lerato Mohajane. The Processes of Impoverishment. Maseru 2013 Morija Publishers

Passage 2

Land Policies of Lesotho

The mountain area communal grazing areas, especially the cattle posts, poses a unique problem for the livestock sector in general. The cattle post areas are under the jurisdiction of principal chiefs. Permits for grazing in these areas are obtained from the principal chiefs many kilometres from the areas. The local chiefs have a minor role to play in the use of the cattle posts. Although transhumance has now been abolished, in theory there is still some animal movement in the areas that are under one principal chief. What has been reduced is the movement of animals from most of the Lowlands to the Mountains.

Control of communal property resources has its origins in the Laws of Lerotholi and was based on the chieftain system. Under these laws, the chief had the right to allocate and direct the management and use of communal resources. The main form of management of natural vegetation (grass, trees, thatching materials, medicinal plants) was to declare the area closed (leboella). There would then be people who are charged with the duty to impound any animals which trespassed or people who harvested without permission. The new legislation changes this.

An area of common property resource management which has not received much attention is the reallocation of fields based on poor land management or failure to use the land. The Laws of Lerotholi and subsequent legislation made provision for reallocation of arable land that was not

being properly managed. These laws have not been put into practice despite the serious degradation of the land that has resulted from poor management practices.

Crop farming is seriously threatened by soil erosion in some areas. Land that is suitable for crop production has already been allocated, and new fields can only be allocated on very steep hills where erosion is a great hazard. Heavy rains and poor land management by field owners has resulted in extensive soil erosion. In some cases there have been land-slides that are caused by excessive rains in the past few months. In discussions at village level, the poor maintenance of terraces was noted as the major cause of soil erosion in the fields and it was noted that this causes a significant decrease in arable land.

Source: Volume 36 Food Security 2013 Moorosi L.B Issue 4 “Agricultural Policies of Lesotho” pp. 3-10

Passage 3

Lesotho Agricultural Capacity Building Project

Poor crop production is seen by most households as the most serious problem of agriculture. Other main problems are: drought, lack of animals for land preparation, lack of land to farm, lack of inputs, poor animal health and management, inadequate labour and lack of machinery, etc. A cross tabulation of perceived problems by household type shows that households in the average category are mostly worried by problems of drought, lack of fields and poor crop production. The below average households are concerned by poor crop production, lack of inputs, lack of fields, drought and lack of animals for land preparation. The only significant problem of the above average households is poor crop production.

A look at what are the perceived causes of the problems show that although there is a long list of causes, the major ones are drought, no rains, poverty, no money, no land to be allocated and inadequate labour to help with agricultural work. Labour to help with agricultural work as a cause of poor production is mentioned mostly by average households while the problem of lack of money is mentioned by below average households. Drought was seen as a cause of lack of seeds because

what was reserved as seed was used up during the drought mostly by average households. However not many below average households saw this is a major cause. It is worth noting that stock theft was reported as a cause of hunger and poverty by below average and average households only.

Suggested solutions for the perceived problems range from praying for rain to building dams and getting employment to earn money. A good number of below average households feel that getting employment would best solve a number of their problems. Relatively more respondents in the average category have no idea about what to do to solve problems that they face. The same households indicate that chiefs should reallocate land that is not being used productively by present owners. Some solutions that have been mentioned include: improvement of extension services, use of fertilizers, access to irrigation equipment, use of pesticides, making share cropping arrangements legally binding, starting communal farming, and many others.

Source: 2010. Lesotho Agricultural Capacity Building Project. pp. 22-34 L.M Semano Sustainable World Volume 38 Issue 10

QUESTION 2 READING COMPREHENSION

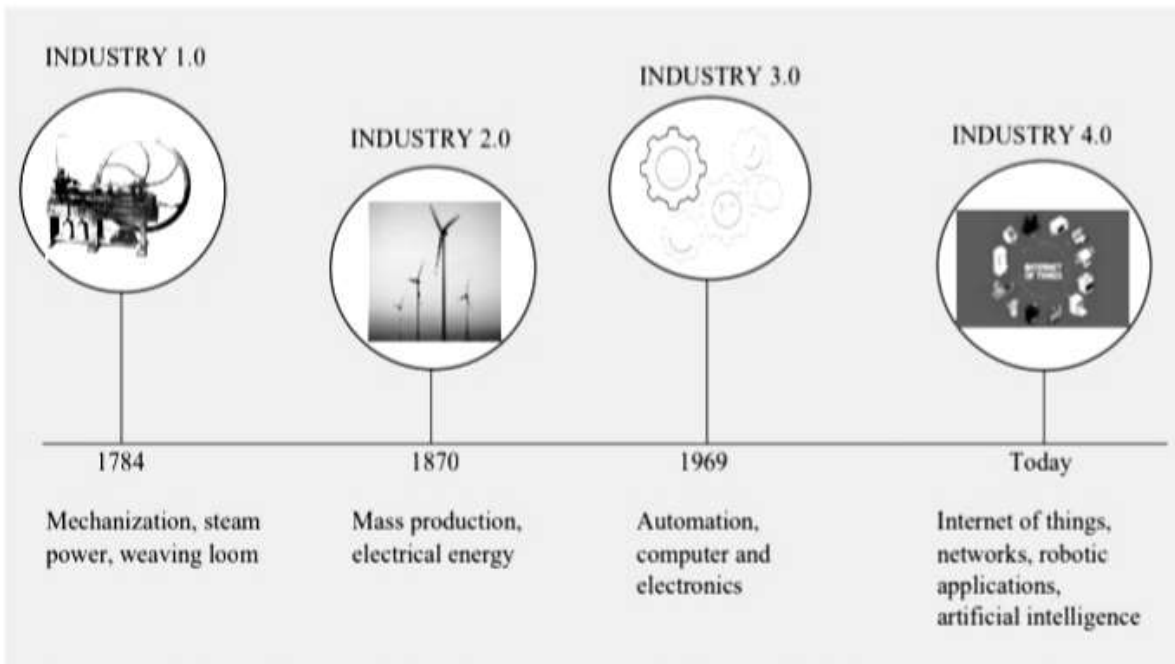
Read the passage below and answer the questions that follow.

Impacts of Fourth Industrial Revolution (4IR) in Agriculture

The Fourth Industrial Revolution (4IR) concept refers to artificial intelligence and big data. This concept has **achieved** significant attention and popularity in precision farming like in monitoring, diagnosing insect pests, measuring soil moisture, diagnosing harvest time and **monitoring** crop health status and reducing complicated monitoring by human. **Traditional** agricultural systems cannot **satisfy** the growing demand of food needs without the productive support of **innovative** technological efficiency. For this reason, 4IR applies agricultural robotics technology that has beneficial outcome for promoting advanced agricultural system reducing labor costs and increasing quality and quantity of food production. 4IR in agriculture is supposed to include the following **factors**: artificial intelligence, robotics technology and human workers; when all these elements are present, the smart farming outcome will be **exponentially** improved.

The robotics technology is used for advanced agricultural applications such as pruning, weeding, spraying and monitoring. At the harvesting **phase** “harvesting robots” are used in order to **expand** food harvest efficiency. There is a “vegetable-picking robot” which can be used for harvesting vegetables specifically. Robotic technology will operate in every area of the agricultural process such as weed control, planting seeds, harvesting, environmental monitoring and soil analysis. Farmers will not be required to work on physically to perform any kind of actions. A robot can do with the given human **commands** and programs embedded on it.

Figure 1: Industrial Revolution



Source: Mooney, L.A. 2003. "Understanding Agricultural Innovations". *Journal of Agriculture*. Vol. 3, Issue 34, pp. 10-22

- a) Briefly explain 4IR. (2)
- b) List at least five (5) areas where the concept of 4IR has gained significant reputation. (5)
- c) According to the author, what are the shortcomings of traditional agricultural systems? (5)
- d) Mention three (3) factors which 4IR in agriculture should be inclusive of. (3)
- e) What is a role of a vegetable-picking robot? (2)
- f) Would 4IR in agriculture be beneficial for Lesotho? Justify your answer. (3)
- g) Using your own words, interpret the information shown in *Figure 1*. (10)
- h) Replace the following words with synonyms with similar meanings or phrases of not more than eight (8) words:
 - i. Achieved
 - ii. Monitoring
 - iii. Traditional
 - iv. Satisfy

- v. Innovative
- vi. Factors
- vii. Exponentially
- viii. Phase
- ix. Expand
- x. Commands (10)

[40 marks]