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2023TSTEG38NA0113 Durée : 02 heures Série : STEG – Coef. 01

Épreuve du 1er groupe

ANGLAIS

The African agriculture sector could benefit from digitalization to improve production and food security. In the face of global climate change and high population growth, digitalization can offer broad solutions needed by African farmers. Digital technology can enable automation processes to increase production and to create learning communities for farmers through mobile technology. Small holders learned how to restore soils using crop rotation, though in some countries, **this** is traditional method, but with new technology, farmers learn types of crops to alternate. The organization *Digital Green* transformed agriculture in India and Ethiopia using technology. Smallholder farmers have been integrated in digitalization using mobile phones and videos for training and education in local languages.

Like in any other sector, digitalization makes it easier for farmers to connect, to access and share 10 information. Through specially designed apps, farmers can create a knowledge-based community in which they share information and learn from each other. In order to increase farmer's productivity, other apps have been developed to measure and analyze soil data like temperature, nutrients and vegetative health by images taken from satellites or drones. Weather forecasts and soil sensors make it possible to manage crop growth in real time and provide information on how to use the right fertilizer and optimally irrigate farms.

In a long-term perspective, **this** might also be able to help consolidate interests and form a common voice that can express issues toward other actors such as governments. Youth have the opportunity to learn from the past and initiate *agri-preneurs* to play a role in the transformation of agriculture, related investment, and agribusiness.

Similarly, farmers can benefit from new digital services with access to information about market, price, 20 products, distribution, and sale of crops, using mobile phones. Access to information could also remove price asymmetry between farmers and buyers; digital payment opens new markets to farmers who could not participate before. Other start-ups offer banking opportunities and credits to farmers who don't have access to the classic banking system. Digital technology can even allow smaller players to be integrated into the value chain, for instance through e-commerce platforms.

http://www.fao.org/e-agriculture/news/now-digital-technology-chamging-farming-africa. (March, 2020)

I. <u>READING COMPREHENSION</u>: (10 marks)

A) Choose the correct option—a), b), or c)—to answer questions 1. and 2.	(02 marks)
1. A good title for this text could be	
□a) Digital Technology in Automated Agriculture;	
□ b) Modern Farming vs. Traditional Farming;	
□c) Digital Solutions for Better Farming.	
2. "Agri-preneurs" (Line 17) are	
□a)business people who invest in agriculture;	
□ b) members of a community of modern agronomists;	
□c)start-up owners who have access to banking opportunities and credit.	

B) Read paragraph 1 and complete the table below about the digitalization of agriculture. (03 marks)

General advantage	Specific advantage	General beneficiaries	Specific beneficiaries	Technology used
Improve production	3.	African farmers	4.	5.
and food security				

C) Read paragraph 2 and match the apps in Box X with their corresponding functions in Box Y.

(01.5 marks)

- **6.** Information sharing apps
- 7. Soil data processing apps X
- 8. Weather forecasting apps

Answer Box				
6.	7.	8.		

- a) Use pictures to collect and interpret data about the land.
- b) Allow farmers to access and stay connected to the internet.
- c) Create digital forums for users to exchange their experiences.
- d) Provide help with the use of chemicals and watering techniques.



21.**⇒**b

22. ⇨

24. ⇔

23. ⇒

25. ⇒

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D) Quote appropriate passages from paragraph 4 to indicate whether these statements are TRUE or FALSE. (02 marks)
9. When producers and customers have access to information, prices can be fixed more equitably.
<i>♥</i>
10. Now farmers don't borrow money from classic banks because they can get credit from other start-ups.
E) What does the word "this" refer to in line 5 and in line 15? (01.5 marks)
11. this (Line 5): 🗢
12. this (Line 15): 🗢
II. LINGUISTIC and COMMUNICATIVE COMPETENCE: (06 marks)
F) Fill in the blanks with appropriate words from the box. (02 marks)
reduce costs * supply chain * time and money * artificial intelligence * processes
Digital agriculture is the integration of digital technology into livestock and crop management and other (13)
related to cultivating and managing food resources. It is about how technology
integrates and works from the beginning to the end of the (14), from seeds or
farm animals to the consumer. A digital farm is far more sustainable and efficient than a traditional one.
Bringing technology into the agricultural sector involves a number of strategies, including (15)
, the Internet of Things (IoT), mobile technologies, etc. One of the biggest
motives for embracing digital agriculture is its ability to save farmers (16)
Adapted from www.advancedmobilegroup.com/blog/what-is-digital-agriculture-and-what-are-the-benefits
G) Complete this statement with the correct form of the words in brackets. (02 marks)
Smart farming and digital transformation in agriculture are quite big buzzwords. Their objective is to make
agriculture more efficient, more resilient, and more sustainable. Remarkable change (17)
(to happen) in the area of control technology over the past few years. Automatic
steering systems ensure that (18) (agriculture) machinery can operate in the field
with an accuracy of 2-3 cm. It is true that sometimes, farmers face technical problems. In some cases, for
example, sensor information has to (19) (to collect) manually from a screen and
transferred to Excel lists, or application maps are brought to the tractor using flash drives. The challenge
is to connect these systems to the Internet of Things (IoT). This will make them (20)
(fast) and more convenient to use. Adapted from https://www.lll.tum.de/interview-smart-farming-and-the-future-of-agriculture.
H) In the answer box, indicate the normal order in which these sentence segments should be arranged to compose a meaningful paragraph. The first segment (b) is given as an example. (02 marks)
(a)countries with arable land since agricultural products can be exported. / (b) What is agribusiness?
(c)and farming-related commercial activities. It involves all the steps required to send an / (d)
Agribusiness is the business sector encompassing farming / (e)agricultural good to market, namely
production, processing, and distribution. This industry is an important component of the economy in Adapted fromhttps://www.investopedia.com/terms/a/agribusiness.asap
Answer Box

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III. WRITING: Choose ONE topic and write about it (04 marks)

<u>Topic 1:</u> Digital agriculture involves technologies such as sensors, drones, precision irrigation systems, GPS-guided machinery, data analytics, machine learning instruments, etc. Do you think African farmers are prepared for the challenges of this new reality? Why or why not?

Topic 2: You are a farmer in a distant rural area but you believe that you can take advantage of the

opportunities offered by digital agriculture. Write a letter to the Minister of Agriculture to tell him about the type of assistance you need on your farm. M. Gérard Crépin GOMIS Boubacar Séga Barry Ministre de l'Agriculture du Sénégal **NB**: Use the following addresses in your letter: Terminale G_{3B}, LETFPK Bd. Du président Bourguiba, BP 4005, Dakar Quartier Hafia, Route de Dioulacolon, Kolda