



INDIAN SCHOOL MUSCAT
DEPARTMENT OF SCIENCE- MIDDLE SECTION
SCIENCE PROJECT - (2019-2020)



CLASS: 8

Total Marks: 10

Date of Submission: 20th August, 2019

Topic: Crop production and management & conservation of plants and animals

Introduction: The word culture has its origins in agriculture. The culture and civilization of mankind found its moorings only after human beings started to settle down in small agricultural communities sometime around 10,000 BC. Agriculture was a quantum leap in the history of man which was made possible only because we had perfected the technique of modifying natural landscapes into agricultural lands using the tools available in those days. Farming is a far more complex mode of production than hunting and gathering which preceded it. Cultivation demands a profound understanding of the climate, seasons and the environment. Collection of seeds, preparation of soil, sowing, protecting the crops from pests and wild animals, irrigation, harvesting and storage – all these practices require cooperation and coordination among the community members and a systematic knowledge that can be passed on to generations.

The comforts and luxuries of the urban life that we all enjoy would have been impossible without the farming that feeds us. It is interesting to remember that the very first city known to mankind, Jericho was founded by a community of Neolithic farmers in Palestine around 9000 BC.

Agriculture created new ecosystems in nature and paved the way for the widespread redistribution of flora and fauna. It even resulted in new adaptations in man like lactose tolerance, larger brains and shortening of the gut length. One good example in modern times, for such a modified ecosystem is the ubiquitous rice fields in India. If you examine the lay of these lands carefully, you would see that they were natural wet lands suitably modified to cater to the needs of food production on a large scale. The inextricable and organic link between agriculture and environment is too apparent to miss. In this summer project let us try to understand some of these intricate relationships existing between culture, agriculture and environment.

Q1. Select any TWO agricultural practices such as ploughing, adding fertilizers or use of pesticides and write how each of it affects the environment (specify whether it is on plants or animals and also the consequences) **2m**

Q2. What is 'slash – and - burn' agriculture? How does it impact the forests, animals and plants? **1m**

Q3. Wild animals raiding crops is a sign of degradation of environment–Justify this statement. **1m**

Q4. Stick the pictures of the following and label them.

- a) Four agricultural practices
- b) Four agricultural implements.



c) Four endangered animals

3m

Q5. A certain forested area in a remote Indian village, Doddabetta was declared a tiger sanctuary. The villagers were prohibited from collecting forest produce like firewood, fodder, berries and honey. The marginal farmers who cultivated the forest lands were evicted. This enraged the villagers as they were deprived of their livelihood. Imagine that you are a government official tasked with finding a solution to this problem.

- a) What will you do to protect the income of the small holding farmers in the forest and those who collected the forest produce without displacing them?
- b) Can farming and conservation go hand in hand? How?
- c) Villagers in India generally do not cause any irreversible damage to the environment. Can you explain?

3m

Note: This assignment should be **hand written in your own words and submitted in a file**. Project should **not** exceed 10 pages. **The matter should not be copied straight from the source.**

Evaluation Criteria: Neatness, Accuracy of Facts, Editing, Relevance of pictures and Promptness in submission

REMEMBER.....

- FARMING IS THE MOST **IMPORTANT** AND THE MOST **HONOURABLE** ACTIVITY!!!!!!
- **SALUTE THE FARMER** WHO PRODUCED THE FOOD ON YOUR PLATE!!!
- **'JAI JAWAN JAI KISAN'** WAS A SLOGAN COINED BY OUR SECOND PRIME MINISTER – **LALBAHADUR SASTRY**.
- ON AN AVERAGE **45 FARMERS** CHOOSE TO END THEIR LIVES IN INDIA EVERYDAY DUE TO POVERY.

