



Master Lesson Plan

For

Basva's Farm

Board	Standard	Subject	Chapter	Language	Reference Link	Creation
CBSE	STD IV	EVS	Basva's Farm	English	Basva's Farm	2020-09

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Basva's Farm

1. MS_Objectives_Basva's Farm

Notes to the teacher: This asset lays down the proposed plan for transacting this chapter.

It states the asset objectives of the MLP.

This asset is for teacher's reference and need not be taught to the students.

Students will be able to:

- Reason some tasks of farming
- Explain the steps of farming and how the seed grows to become crops
- Identify the types of instruments and tools used by a farmer
- Relate to the importance of weeding for having a good harvest
- Appreciate about an innovation, driverless tractor
- Draw a tractor using their footprint
- Importance of working together as a team

Time to teach	Asset Type	Theme	SubTheme
3 Minutes	Main Script	Farming	Weeding, Instruments and T Crops, Weeding, Instrument Growing Crops

2. IQ_Sowing Seeds

1) Why do farmers loosen the soil as a first step during the sowing season?

Suggestive answer- *The farmers loosen the soil by ploughing and keep it moist by irrigating before sowing seeds. Farmers do this to maintain a proper texture and appropriate moisture of the soil. This will help the sowed seed to sprout well when sowed during sowing season.*

2) Why do farmers sow the seeds at a uniform distance from one another?

Suggestive answer- *The farmer ensures that the sowing of seeds is done methodically at a proper uniform distance from one seed to another. This is because plants need some space to grow and extend their roots under the soil and their branches above the soil. Only if there is space between them, they will get sufficient amount of sunlight and nutrients to grow.*

Time to teach	Asset Type	Theme	SubTheme
3 Minutes	Inquisitive Questions	Farming	Growing Crops, Growing Cr

3. MS_From Seed to Crop

From Seed to Crop

Teacher may begin the session by asking the following questions and having an interaction with the students.

Q.1 Have you seen a plough drawn by two bullocks? What is it called in the lesson?

Suggestive answer- The plough drawn by two bullocks in the lesson is called 'kurige'.



Q.2 Have you seen farmers working in the fields? What do they do in the fields?

Suggestive answer- The farmers prepare the fields for planting, care for the crops and harvest when the crops are ready and finally sell them in the market.

Teacher may explain the following.

Plants which provide food to us are grown on farm by the farmers. A farmer depends on his crops for his survival.

The steps of farming are-



1. Preparation of the soil is the first thing a farmer does to loosen up the soil and make it soft.
2. Addition of manure and fertilizers in the soil is essential to maintain the fertility of the soil. While sowing of seeds a farmer has to keep in mind the appropriate time and weather conditions and also the right amount of seeds to be sown.
3. Proper irrigation at regular intervals should be done. A clever farmer knows the right amount of water to be given to the plants.
4. Weeding is very important as the new plants need proper nutrition from the soil.
5. Crop protection using insecticides and pesticides, is needed to maintain a healthy growth.
6. Harvesting is the process of collecting mature crops from the fields.



Proper storage and packing of crops is vital to keep it safe from moisture, insects and pests.

The journey of crops



1. From field to whole sale market- The farmers send the food items to the whole sale market by trucks, tractors or bullock carts.
2. From wholesale market to retailers- from wholesale market food items are bought by retailers. These retailers sell these products in the local markets.
3. From retailer to our home- We buy food stuff from these retailers. These food items are then cleaned, washed, cooked and served to us.

Let's see an example of how Onion grows.

Onion crops are sown in the month of July. When it becomes ready to harvest, the farmer harvests and sends it to the market. Onions are stored in gunny bags and sold in market (mandi).

Different steps are involved from sowing seeds to harvesting.

First, the soil is ploughed using a spade or tractor. Nutrients and fertilisers are added to the soil for the proper growth of the crop.

Onions should be planted in a sunny or partially shady spot with little wind. They shouldn't be planted in heavy clay soils.

Onion seeds are sprouted and the sprouts are planted in rows in the soil. A distance of about 10 cms. is kept between the plants so that there is enough space for them to sprout and grow into onions.

The plants are then properly irrigated.

Weeds that grow are removed because they are unwanted plants and can harm the yield of the crop.

Onions grow below the soil. It shoots up with pipe like green leaves.

The onions are ready to be harvested when the leaves start turning yellow or it dries. The onions have to be harvested on time otherwise it will spoil and rot in the soil itself.



Image Source:

<https://pixabay.com/en/ox-plough-bullocks-farmer-tiling-253417/&sa=D&ust=1554456284359000>
<https://pixabay.com/en/agriculture-farming-plow-husbandry-1344505/&sa=D&ust=1554456284359000>
<https://pixabay.com/en/combine-harvester-agriculture-1906532/&sa=D&ust=1554456284360000>
<https://pixabay.com/en/potatoes-potato-harvest-agriculture-16774/&sa=D&ust=1554456284361000>
<https://pixabay.com/en/onion-arable-field-onion-field-3540502/>

Time to teach	Asset Type	Theme	SubTheme
10 Minutes	Main Script	Farming	Growing Crops, Growing Cr

4. DD_Weeding

You may have a garden at home where you grow plants or you may be from a family that engages in agriculture. Lot of efforts are put in to grow the plants or crops.

It is many weeks of continuous hard work. Only the right seeds, sprouts or plants are sown or planted. But somehow from somewhere, unwanted plants grow along with the plants or crops. These unwanted plants are called weeds.

What are weeds?

Weeds are plants that are not sown but grows along with the plants or crops that are sown. Basically weeds are unwanted plants that interferes and creates problems for the proper growth of the plants or crops.

Problems caused by weeds:

1. Weeds reduce the crop yield as they absorb water, light and soil nutrients that is meant for the crops.
2. Weeds contaminate the soil as they produce certain chemical substances that reduce the quality of the crops.
3. Weeds serve as hosts for crop diseases. The crops get affected as they also provide shelter for insects which may infect the crops.
4. Weeds also interference with harvest.

It is very important to constantly check your garden and fields and regularly remove the weeds. Weeds have to be removed on time otherwise they spread very fast.



<https://pixabay.com/en/garden-work-weeding-beds-poppies-822295/>

Time to teach	Asset Type	Theme	SubTheme
5 Minutes	Day-to-day Relevance	Farming	Weeding, Weeding

5. MS_Instruments and Tools of a farmer**Instruments and tools of a farmer**

Teacher may start the session by stating the traditional and modern farming instruments and tools. Teacher may further have a discussion about the advantages of modern instruments and tools over traditional ones.

Traditional farming:

In traditional farming the farmer uses animals for tilling/ploughing the field, water mills for irrigating the field and manures for soil nutrition. Harvesting, separation of grains and transportation to storehouses or markets have to be all done by people manually.

**Modern farming:**

In Modern farming, farmer uses modern techniques such as tractors for tilling the field, electric water pumps for irrigating and fertilizers for soil nutrition. They also use crop harvesting and threshing machines. The machines help to cut the crops from the fields when it is ready to be harvested and also help to separate the grains. The tractors also have big trailers in which the grains can be carried to the storehouse or market.

**Discussion –**

Two farmers had their farms next to each other in a village. The size of both the farms were same. One farmer relied on traditional methods of farming and the second farmer used modern. Who do you think had better yields? Who had more crops?

Students may come up with various answers. Teacher may then sum up by stating the advantages of modern farming over traditional farming.

Both farmers had the same farm sizes and similar crop pattern, however the second farmer who used modern farming had more crops.

The second farmer was able to ensure sufficient moisture in the field and good quality soil for crop growth, and therefore higher crop yields. Second farmer also required less manpower for farming activity.

Modern tools and their benefits are as below:

- Tractor for ploughing: Deep tilling rejuvenates the soil, can plough the same field in much less time than animals.
- Electric pumps: Provides sufficient water to fields for maintaining moisture with much higher efficiency and less effort.
- Crop Harvesting / Threshing Machines: Reduces crop losses, separates grains from chaffs without any loss.

Replacement of animals by vehicles:

- Tractor for tilling
- Electric pump set instead of cattle driven water mills
- Tractors trailers instead of Bullock carts for transporting crop produce to markets

Image Source:

<https://www.pexels.com/photo/agriculture-close>
<https://www.pexels.com/photo/blue-tractor-next-to-white-farm>

Time to teach	Asset Type	Theme	SubTheme
10 Minutes	Main Script	Farming	Instruments and Tools, Instr Tools

6. IA_Driverless Tractor

The driverless tractor was invented by an Indian named Pramod Gautam, a former automobile engineer. He started off farming on his own field but could not get good benefits in the beginning. He had to increase his farming and harvest to get better benefits and earn a better income. He started horticulture, planting and selling potted plants like flowers and ornamental plants. He had to do the jobs of farming and taking care of his horticulture. So he innovatively discovered the driverless tractor. The tractor as the name suggests functions without a driver and performs all the agricultural farm duties. The purpose of inventing driverless tractor was to handle many agricultural tasks single handedly.

Image Source:

<https://www.pexels.com/photo/green-tractor-pulling-red-bin-on-field-at-daytime-53622/>

Time to teach	Asset Type	Theme	SubTheme
3 Minutes	Interesting Asides	Farming	Instruments and Tools, Instr Tools

7. SA_Footprint Tractor

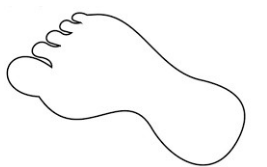
Aim: To make students draw a tractor using their footprint. Students will also be able recollect the uses of tractors in farming.

Resources: A4 size white paper, pencil and crayons or sketch pens

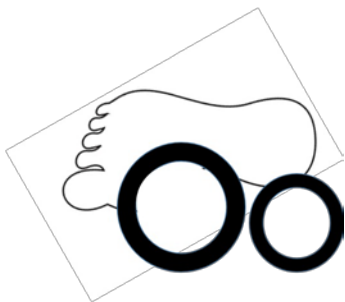
Preparation: Teacher to ensure that all students have the required materials. Students should also remove their shoes and socks from their right leg to draw their footprint.

Procedure:

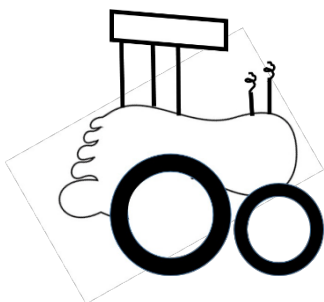
1. Place the right foot on the white paper and trace the outline.



2. Draw two circles with broad outlines for the two tyres of the tractor.



3. Draw the other parts of the tractor as shown below.



4. Colour the Tractor



Once the students draw and color the tractor, teacher can interact with the students or ask them to speak about the various uses and benefits of a tractor in farming.

Instruction to the teacher: Teacher may ensure that students use paints appropriately and also clean up after the activity.

Precautions: NA

Troubleshooting: NA

Images – Self Drawn - srividya.sssvv@gmail.com

Time to teach	Asset Type	Theme	SubTheme
10 Minutes	Suggested Activity	Farming	Instruments and Tools, Instr Tools

8. VC - Working Together as a Team

India being an agricultural country, majority of the people depend on agriculture for their sustenance.. Indian farmers are equated to the back-bone of the society. Indian farmers are generally illiterate, economically poor but very hard-working.



- Indian agriculture is mostly a family occupation, where the entire family works in unison.



- During harvest time, as everything is time bound, each one contributes their share of labour.
- It is so much of fun for the children, going to the fields, watching the tractors and the sprouts and the seeds and a whole lot of activity.
- Harvest time is like a festival time.



- House is full of people, each one working in co-ordination with each other, lots of work and lots of fun too.

Students!

- Realize the importance of cooperative effort, agriculture being the best example.
- Help elders and others at home, sharing their chores.



Image Source:

- Farmer: Image, CC <https://pixabay.com/photos/plough-animal-india-farm-field-1761505/>
- Harvest: Image, CC <https://pixabay.com/photos/sugarcane-harvest-bullock-cart-223437/>
- Harvest: Image, CC <https://pixabay.com/photos/paddy-harvest-hay-stack-workers-207964/>
- Family: Image, CC <https://pixabay.com/photos/wash-help-joy-family-scooter-2786659/>

Time to teach	Value Type	Value Sub Type	Value Attribute
5 Minutes	Right Action		Group Activities

9. QA - Farming

Tick mark the correct option:

1. Name the vegetable that grows under the soil.

a. Potato b. Tomato c. Pumpkin d. Chilly

2. The leaves of onion turns into this colour when it is ready to be cut.

a. Brown b. Yellow c. Green. Red

3. Which tool is used to cut the dried leaves of onions?

a. Spade b. Sickle c. Plough d. Plucker

4. Tick the unwanted plants that grow with crops?

a. Spinach b. Radish c. Weeds d. Potato

Answers- 1.a; 2.b; 3.b; 4.c

Match the following:

- | | |
|------------|---|
| a. Bullock | 1. To sprinkle seeds in fields |
| b. Kurige | 2. Plants that grow without being planted |
| c. Illige | 3. To dig the soil and loosen it |
| d. Khunti | 4. To cut the dried leaves of onions |
| e. Weeds | 5. To pull the plough |

Answers- a. 5; b.1; c.4; d.3; e. 2

Answer the following questions:-

1. Why should the weeds be removed?
2. Why should onions be taken out at the right time?
3. How many days after the seeds were sown do the sprouts come out?

Ans.1 Weeds need to be removed so that they do not take up all the water and fertilizers.

Ans.2 If the onions are not taken out at the right time, they will rot in the ground itself.

Ans.3 It takes almost 20 days for the sprouts to come out of the seeds.

Fill in the blanks:-

1. _____ is an iron rod used to dig and loosen the soil.
2. _____ is used for sprinkling the seeds.
3. _____ also come up along with the sprouts.
4. _____ is used to take gunny bags filled with onions from the farm to the market.

Answers :

1. Khunti
2. Kurige
3. Weeds
4. A truck

Time to teach	Asset Type	Theme	SubTheme
10 Minutes	Assessments	Farming	Instruments and Tools, Instr Tools

10. MS_Summary_Basva's Farm

In this lesson we learnt:

- Steps of Farming
- Growth from Seed to Crop
- Instruments and Tools used
- Importance of Weeding
- Importance of Team Work

Time to teach	Asset Type	Theme	SubTheme
5 Minutes	Main Script	Farming	Weeding, Instruments and T Crops, Weeding, Instrument Growing Crops