

Agro Awareness at the Primary Stage

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Abstract

There is a growing concern worldwide that young people have become disenchanted with agriculture. This is all the more worrying because humanity needs more food in the foreseeable future, due to the rapid increase in the world population. In developing countries where agriculture is likely to provide the main source of income in a majority of households, it is vital that young people are connected with farming. In India, agriculture, with its allied sectors, is the largest source of livelihood. About 70 per cent of India's rural households still depend primarily on agriculture for their livelihood, with 82 per cent of farmers being small and marginal. However, with growing urbanisation, more education, and the development of skills, the younger generation is moving away from agriculture. It is not simply a shift from rural to urban areas; there is a shift in mindset as well. A short survey conducted by the author indicates that young learners at the primary stage of schooling did not find agriculture appealing as a means of livelihood. The paper focuses on how such perceptions had been formed and states that a positive perception of agriculture can be strengthened in the next generation right from the primary stage of education. This would enable young learners to view farming, and allied areas, as desirable professions. The younger generation with a positive outlook towards agriculture would learn the traditional methods of farming and then may find ways to combine them with new technologies to get optimum results.

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INTRODUCTION

The United Nations has stated that by 2050, the demand for food will increase by 60–90 per cent. In simpler terms, by 2050, humans would have to produce as much food as has been produced in the past 10,000 years. This is because of the increase in population worldwide.

India is one of the most populous countries. Agriculture plays a vital role in its economy. The UN report states that “agriculture, with its allied sectors, is the largest source of livelihood in India. About 70 per cent of its rural households still depend primarily on agriculture for their livelihood, with 82 per cent of farmers being small and marginal.” (UN, 2018)

As in most countries, the current trend in India is population migration from rural to urban areas. Gradually, over the decades, this has resulted in an ever-growing divide between people involved in agriculture and those who are not. This is reflected in the wide variance of attitudes towards agriculture as a means of livelihood. These attitudes find expression either verbally or non-verbally and are imbibed by the younger generation.

The author surveyed 100 children in the age group 8–10 years. The survey was conducted through a short questionnaire developed by the author. The questionnaire was in two parts. Part A tested the respondents’ knowledge of specific agricultural products; Part B dealt with their perceptions about agriculture as a financially viable career option. A

group discussion was also held. The parents’ consent was obtained. All the respondents were from a village named Unkal, which is located on the outskirts of the city Hubbali in Karnataka.

The results of the study are as follows:

Part A: Agricultural Products

1. COTTON

- 66 per cent of the children did not know where the cotton comes from.
- 10 per cent said that it is an animal product.
- 24 per cent said that it comes from plants.

2. DAL

- 80 per cent could not distinguish between *moong dal*, *tuvar dal* and chana dal (green gram, yellow lentil and chickpea, respectively).

3. MILK

- 80 per cent answered that milk comes from cows and buffaloes.
- 20 per cent said that they bought it from the local dairy shop.

Part B: Perceptions

- 43 per cent did not connect science with agriculture.
- 60 per cent said that farmers are illiterate.
- 50 per cent linked agriculture only with food grains (not with the production of fruits and vegetables).
- 95 per cent said that they would not prefer to take up farming for their livelihood.

- 80 per cent said that farmers do not make enough money.

FINDINGS

- There are negative perceptions about agriculture as a means of livelihood.
- There is a lack of information regarding primary agricultural products.
- There is less awareness about careers allied with it.

This exploratory study throws some light on the perceptions of young children towards agriculture. The Cambridge English dictionary defines perception as “a belief or opinion, often held by many people and based on how things seem.” As a well-known poet put it, “If the doors of perception were cleansed, man would see everything as it is” (Blake, 1975). Social perception refers to identifying and utilising social cues. A research study outlines how children come to understand beliefs, including false beliefs, at 4–5 years of age. It states that “humans are the only species to operate with the concept of ‘false beliefs’ which essentially means that one accepts a perspective because it is socially acceptable.” (Tomasello M., 2018).

BASIS OF PERCEPTIONS

Referring to the research study on the 100 children, the author attempted to probe further into how these perceptions were formed. During a group discussion, it was found that if

the children did not do well in school, they were told that “you are fit only to graze cattle” or “your life is too soft and easy. I will put you in the fields to work as a farmer.” This is best exemplified in what a well-known columnist wrote: When I was in Class 5, I did so poorly that I was on the verge of being expelled. I recall my father scolding me, “You better study hard and pass your exams, otherwise I will send you to our village and make you a farmer. Then you will spend your whole life showering cattle, cleaning cow dung, getting bitten by reptiles, and exposing yourself to the hot sun and harsh rains.” While I did not know what being a farmer really was, his words made me believe it was not ‘cool’. Farming seemed like an occupation for those who did not have other options, an occupation without dignity. In Class 10, most of my 50 classmates wanted to be engineers and doctors, a handful wanted to be pilots, and I chose to be a chartered accountant. No one wanted to be a farmer (Sathya, 2017).

Perceptions are also formed in children’s minds when they overhear adults discussing current events, or when they listen to the news. One such news item that left a lasting impact on the general public was that of farmers’ suicides that seemed to be occurring with frightening frequency.

One positive experience cannot change a perception. In other words, a change of perception does not happen immediately. Ideally, positive experiences related to agriculture

should be introduced at the primary stage of education. The school system reaches out to many young minds, and hence this opportunity of motivating children to learn about agriculture should not be lost.

It should be ensured that children grow up well aware of what modern careers are available in agriculture. It is immaterial whether they choose to take up a career in agriculture or not, but at least it would change their perception of agriculture as a career.

CURRICULUM AND TEXTBOOKS

The curriculum at the primary stage is dominated by concepts in mathematics, aspects related to health and hygiene, and stories, poems, and art-related matters. Further, while the current textbooks do mention agriculture, they do not showcase it. For instance, the chapter “Seeds and Seeds” in the EVS textbook introduces students to various seeds having different colours, sizes, and shapes; it also encourages students to germinate and consume them.



So many seeds!

How many types of seeds can you collect? Where will you find them? Each of you should try to collect as many different types of seeds as you can. After that, put all the seed collections together. Now observe these seeds carefully — their shapes, sizes, colours, textures (smooth, rough).

The chapter also provides information on how seeds ‘travel’ even though plants are stationary.

However, the textbook content seems to offer a ‘sanitised’ idea of a farmer. For instance, it states that farmers would grow many different kinds of crops — grains and vegetables — according to the season. The farmers kept enough for their needs and sold the rest to shopkeepers from the city. Some farmers also grew cotton. At home, family members spun cotton on a *charkha* (spinning wheel) to make cloth (NCERT, 2011).

Another example may be found in the English textbook, *Raindrops* which introduces young learners to a rural lifestyle and talks about a



farmer “who works hard in the field” (NCERT, 2016). Not much is said about the hard work or the knowledge it entails.

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Children are exposed to news: in the news items read out in the morning assembly at school, on radio and TV, or by overhearing elders talk about burning issues of the day. They see photographs in the newspapers of children of their own age, or younger, suddenly becoming orphans, due to factors beyond their control or understanding.

Farmer suicides are the unfortunate result of agrarian distress in the rural economy in India. Studies have shown the relationship between farmer suicides and issues such as monsoon failure and drought. Their problems are further compounded by lack of social security, and in some cases, increasing debt burden. One such study concludes that, “Farmers’ suicides in Vidarbha are caused by the complex interplay of social, political, and environmental constraints. Hence, a comprehensive intervention to ensure self-reliance and capacity building among farmers in modern farming techniques, a monitoring, and support system for vulnerable farmers, and a village-level, transparent system for disbursement of relief packages—all will be needed to prevent farmer suicides in the near future. Apart from this, there is a need to strengthen the

National Mental Health Program at the primary health care level to offer support and counselling to vulnerable farmers in rural areas” (Dongre & Deshmukh, 2012).

A chapter in the EVS textbook cites the methods followed by two farmers in terms of ploughing, irrigation, etc. One follows the traditional method of storing seeds, sowing them, and letting the soil ‘rest’ from time to time; the other uses tractors for ploughing, a motorcycle to transport the produce to market, and fertilisers in his fields. It invites young learners to reflect on the meaning of ‘progress’ in agriculture (NCERT, 2011).

Knoblock states that “Elementary (primary) students need authentic learning experiences with community-based topics to motivate them, help develop inquiry skills, apply academic content, and connect their learning beyond the context of the classroom. In particular, the study of food, agriculture, and natural resources in elementary (primary) classrooms can bring learning to life” (Knoblock & Martin, 2000).

BEYOND THE FIELD

Young learners may be made aware of farming, freshwater aquaculture, rose agriculture, and dairy farming. This need not be in great detail, but just enough to let them know that these are viable options.

Getting students engaged in understanding the processes of agriculture at a young age would help

them identify that they can make a livelihood through agriculture. A recent article states, “This is a pragmatic generation—they care about making a difference, but are ultimately motivated by ensuring they have a secure life outside of work” (Patel, 2017).

Additionally, young learners may be informed that science can help enormously in food production. A biologist can help control the incidences of plant diseases and pests; a veterinarian can provide medical support to domestic animals and poultry; a scientist can study soil quality.

Besides providing for the livelihood of farmers and labourers, the agricultural sector also ensures food security for the people of a nation. The Food and Agricultural Organisation (FAO) of the United Nations defines food security as a situation where all people have, at all times, physical and economic access to sufficient, safe and nutritious food that meets the dietary needs and food preferences for a healthy and active life (UN, 2015).

Despite high levels of production in India, 15 per cent of the population continues to be under-nourished, as per 2014 estimates (GoI, 2015–16).

India enacted the National Food Security Act in 2013. The Act aims to provide food and nutritional security to people by ensuring access to adequate amounts of quality food at affordable prices (GoI, 2013).

CONCLUSION

Children as young as 6 or 7 would become aware that there is a world beyond their neighbourhood; children at the age of 8 or 10 would understand the concept of ‘nation’, and that there are countries other than India. Their young minds may be gradually introduced to the fact that worldwide there is an attempt to remove poverty and hunger. It should not be thought that these concepts are beyond their understanding. Children are more perceptive than adults, give them credit for; in fact, children are much more compassionate than adults. Hence, they should be introduced to terms such as food waste, nutrition, soil health, water quality, etc., but through relatable examples and in an age-appropriate manner. This would facilitate their understanding of the complexities of agriculture at a later stage and enable them to learn about modern agriculture, and its interactions with the environment and nutrition.

There is a gradual but steady shift of surplus labour from agriculture to the non-agricultural sectors. Although income mobility improved country-wide in the seven years to 2012, the progress was unequal between states, while the likelihood of children pursuing the same occupation as their fathers appears to be declining as even after spending crores of rupees in the twelfth five-year plan, villagers continue to live in rural poverty. In the Wire’s exclusive interview with

Dr. K. Ramaswamy, the Vice-Chancellor of Tamil Nadu Agricultural University (2017), he stated, that about 75 per cent of rural India, has such low monthly incomes that farmers are not able to feed their families. This leads to children considering agriculture as a risky sector to venture into. He further said that to change this outlook, children need to see live examples of other youth who are earning well. This will not only encourage them to explore the agricultural sector, but also believe that by attaining proper skills and knowledge, one can explore various possibilities in that sector and earn well. He even mentioned various steps taken by the university and the government to make farmers and the youth aware of the

day-to-day developments made in the field of agriculture, one of which was Agriportal, a website maintained by the university which provides information about the recent developments in the agricultural sector for the benefit of farmers. He also mentioned the scheme Attracting Rural Youth in Agriculture (ARYA) launched by the Indian government, which would not only attract rural youth to agriculture by making them self-dependent in agriculture but also makes the states self-dependent in agriculture. Another scheme, Agricultural Technology Management and Training (ATMA) provide training to rural youth on how to make proper use of barren and uncultivated land and grow pulses.

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