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Home Science Extension Education and Rural Development



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Dedicated to my Father

PREFACE

This is a textbook, written for undergraduate and postgraduate students in extension education at Home Science Colleges. It shall serve as a reference book for extension students of Agriculture, Veterinary, Forestry, Fisheries, and Basic Science at the Universities, College and Institutes. It shall as well serve as a handbook for Government Departments, Non- Government Organizations, Rural Banks and Cooperatives, Krishi Vigyan Kendra, etc. and help them in extension works. This book describes the meaning, process and evolution of extension and extension systems of pre independence era to present era. It comprehends the relationship between Home Science education with extension system familiarizing with the structural and functional concepts of rural society. The fourth and fifth section of the book explains the different Extension Teaching Methods and teaching aids used while extending information at the village because of an extension worker, it is important to know its concept, use, importance and limitations of each of the extension teaching methods so that they can use it efficiently. However, these course contents are strictly and purely meant for the use to the student community, teaching and research fraternity of Home Science, Agricultural and allied Sciences all over the globe in general and India in particular.

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CHAPTER 1

HOME SCIENCE EXTENSION EDUCATION

1. HOME SCIENCE EXTENSION EDUCATION

1.1. EDUCATION

Education is the process of giving training and instruction to people to develop their knowledge, abilities, skills, character and mental powers.

The modern definition of education is the production of desirable changes in human behavior, i.e.: change in knowledge (thing's known), attitudes (things felt) and skills (things done) in all of them or in one or more of them.

Knowledge: It includes facts, concepts, principles and relationships. Example- Extension worker educates the housewife on the preservation of mango fruits. (Change in knowledge)

Attitude: - Attitude can be loosely defined as a feeling towards some object, person, and situation or idea. Example- extension worker changes the negative attitude of a housewife and makes them adopts preservation of backyard fruits) (things felt).

Skill: Ability to do things. Example: Extension workers improve the skills of a housewife in learning the techniques of mango squash and using chemicals to preserve for long days (things were done).

1.2. MEANING OF HOME SCIENCE EDUCATION

Home Science Education is the well-structured education of home living. Through its core courses such as clothing and textile, foods and nutrition, human-resource development, human development and extension education, it helps to bring economic independence in individual to raise the standard of living. Science of Home is concerned with maintenance and enrichment of human relationship within and outside the family, through the development and judicious use of all human and material resources to achieve maximal satisfaction for all members of a family. Home Science Education advocates for the personal and professional development of all members of the family.

1.3. HISTORY OF HOME SCIENCE IN INDIA

The teaching of Home Science in India has a short history. During the British Rule between 1920 and 1940, the then rulers introduced Home Science in some schools and colleges. In the beginning, Home Science was referred to as Domestic Science. The princely state of Baroda was one of the first states to introduce Home Science in Schools, in Maharani Girls High School. The subject remained in the school curriculum in several states. After winning independence India in 1947, many changes were brought about in its curriculum. In the sixties and seventies, Home Science and related subjects were fused together at the school level. A stream was developed at the higher secondary level in Gujarat and some other states. Gradually, Home Science became a popular subject in Delhi, Uttar Pradesh, Madhya Pradesh and some southern states. Even so, the courses were not offered at the college level of that time. Hence, many institutions faced problems of providing further opportunities for students who completed Home Science at the secondary level. In 1932, Home Science was started at the college level in Lady Irwin College in Delhi. From 1938 onwards Madras University offered Home Science at the degree level. Queen Mary's College and Women's Christian College in Madras started Home Science in 1942. The Agricultural Institute of Allahabad also started a Home Science Diploma course in 1935. In 1945, it turned into a University Department. By 1950, Baroda became a significant nucleus of Home Science education. Since 1950, outstanding Home Science Colleges were started in Coimbatore (Tamil Nadu) Ludhiana (Punjab) Bombay (Maharashtra) New Delhi, Udaipur (Rajasthan) and Tirupathi (Andhra Pradesh) in the mid-1960 and 1970's Agriculture Universities were established in most of the states. The teaching of Home Science was recognized in most of the Agricultural Universities. There is a steady progress of Home Science education in India at the school and college levels. In 1920 only a few students enrolled in Home Science. By 1980s, many influential institutions in India offered by B.Sc, M.Sc. and Ph.D. degrees in Home Science. At present, thousands of postgraduates and Ph.D. degree, holders are in prominent positions in reputable institutions all over the country.

1.4. CONCEPT OF HOME SCIENCE

A plan of teaching Home Science must begin with an understanding of the discipline of home science. It is a simple, direct explanation of the relevance and significance of home science in the modern context. People often ask how home science is associated with the home. This question brings out the basic premises upon which the discipline of home science is built. The science of the home is concerned

with the maintenance and enrichment of human relationships through the development and judicious use of all available human and material resources to achieve a maximal satisfying life for all members of the family. Home science education prepares youth for the greatest of all vocations - Home Making. It orients young girls and boys towards preparation for some professions- teaching, nursing; dietetics, research, welfare, management, art application, extension work, and communication. There are some ways of managing homes. Men, as well as women, have played the roles of breadwinners and homemakers. It has become necessary for men to share housework, to enable women as professional persons to contribute to the nation.

It advocates that

- Home is a place for the development of both sexes through equal opportunities.
- The individual and professional development of both sexes is possible within the home.
- The roles and norms for both sexes pertain to their individual and professional lives.

Therefore, the imbalance between the roles of man and woman must be avoided. The single dimensional role of a woman as a homemaker produces constraints for women's development within a society, and individuals have changed and therefore, the woman is the lopsided role as a homemaker, needs to be fused with professional roles. All knowledge applied is fundamental, which can be used to liberate women and men from undue pressure within and without the home, is the content of Home Science. The goal of home science education is to help everyone to live more useful and satisfying personal, family and community life. General-education aims at the all-round development of individuals to enable them to take their places in society as effective members. In the development of their abilities, the emphasis is placed on personal development for living in a social group. The functional philosophy of education calls for Preparation for living through living. Home science helps to fulfill these purposes in a unique way. It helps pupils to develop a point of view that challenges them to explore how to live together happily with their families, other social groups, and communities. Home science aims to achieve family happiness, raise its moral standards and improve its economic conditions, and these objectives are to be achieved by fully allowing the man as well as the woman to develop personally and professionally. Home is a place where life begins and school is the place where formal education begins. Hence what has been generated at home can be further enriched at school.

Following are the reasons for introducing Home Science at Secondary School Level.

1. The secondary stage of education is the stage where young learners become of educable age and are sensitively aware of homes and families and are in need of emotional security, acceptance, and feelings of belonging. The study of home science can strengthen this emotional security and develop commitment and loyalty to the family.
2. This provides the opportunities for students to recognize themselves in their own family, community, and nation through identifying their responsibilities, roles and resources.
3. The formation of habits and practices regarding eating, health, cleanliness, homemaking, dressing, parts of the body and sex, different stage in life, etc. is imparted in the school through this course.
4. All skills required by individuals to communicate to others and be well placed in the society are possible only through Home Science.
5. Many boys and girls take an interest in interior designing, architectural work, stitching, cooking, etc. and home science will help these students in fulfilling their desires.
6. Many are compelled to terminate their formal education at the secondary stage. A course in home science ensures that students can take up many careers even at this age since they are well equipped with the information needed for this.
7. Students with an inclination for service to the needy can do community work to the best of their abilities since home science gives them the opportunity to use varied extension methods and audio / visual aids.

Home Science is a well-expanded discipline at the college and university levels. Students, passing out from Higher Secondary Levels can opt for specialization offered. Having understood the concept of Home Science, let us look into the origin of home science in India and the beginning of the Home Science Association of India.

1.5. HOME SCIENCE IN NATIONAL DEVELOPMENT AND INTERNATIONAL INTEGRATION

National Integration is an attitude based on a feeling of oneness, common ideals of life and a shared code of behavior. In India, one finds marked differences in the living standards, dress, customs, religion, dietary habits, and culture of the different people living in different parts. Regionalism, casteism, communalisms is the disruptive

influences, which have divided Indian society into different groups. In this context, it is the duty of the parents and teachers to inform the child to appreciate definite and positive terms the faith, customs, manners and practices of all persons belonging to the language, and religions other than his own.

The family is the primary socializing group in society. It exerts the most fundamental and profound influence on every human being. Not only does it influence the child's basic personality, but it also introduces him to the mores and values of the larger culture. In it lie the tremendous socio-psychological forces, which determine the behavior of the child for good or for evil. Similarly, when the child enters school, the teachers and peer groups have a great influence on the Childs outlook. In this context, home science plays an important role in molding the child's character and widening his thoughts, ideas, and feelings, etc., both at home and in school. Alike, a child gets to interact with people outside our country. This happens when she/he moves to foreign countries for studies, work, etc. or after marriage or on exchange programs. Due to advances in technology and communication, there is so much of influence and impact of other advanced countries. Media plays an important role in this. Mothers and teachers are responsible for directing the child to the right path in guiding him/her to choose the best of what is provided for him/her and ignore the rest. Life cannot be sustained without adequate nourishment, good health, protective environment, better housing, managerial qualities/skills, empowerment, suitable resources, communication skills, high literacy levels and aspirations. All are essential for national development. Home science is an integral course which builds an individual with all these qualities and thus aims at the development of individuals, his family, the community and the nation at large. Home science also encourages children to participate in community extension activities and therefore make them realize their commitment to their society and less privileged and school dropouts in rural and urban areas. One of the major roles played by Home Science in an individual's life is to make her/him realizes the need for extending the knowledge gained through formal education to the less privileged who are deprived of attending formal education. Hence we need to understand the meaning of extension education and the methods of non-formal teaching.

1.6. MEANING OF FORMAL, NON-FORMAL AND INFORMAL EDUCATION

1.6.1. FORMAL EDUCATION

Formal education is the highly institutionalized, chronologically graded and hierarchically structured education system, spanning lower primary school and the

upper reaches of the university. Example: Primary Education, School Education, College Education and University Education.

1.6.2. INFORMAL EDUCATION

Informal Education is the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure in the environment at home, at work, etc. Example: Reading Newspaper, listening radio, interaction with fellow citizens

1.6.3. NON-FORMAL EDUCATION

Non-formal Education is an organized, systematic, educational activity carried on outside the framework of the formal system to provide selected types of learning to particular groups within the population. Example: Adult education, School dropout education, Bridge schools.

1.7. DIFFERENCES BETWEEN FORMAL, NON FORMAL AND INFORMAL EDUCATION

Table 1.1: Formal and Informal Education

Sl.No	Criteria	Formal Education	Non Formal Education	Informal Education
1	Concerned with	Educational growth of children, youth preparing them for the future	Adults and youth actual life situations	Incidental learning
2	Attendance	Is compulsory	Participation in voluntary	
3	Learners	Are relatively more homogeneous in terms of their age, academic qualification, experiences, knowledge, interests, and needs.	Are relatively more homogeneous in terms of their age, academic qualification, experiences, knowledge, interests, and needs also vary with value systems, cultural backgrounds.	Individual learning process.
4	Preconceived idea's	Learners do not generally have any preconceived ideas.	Learners generally have preconceived ideas and notions because of their past experiences	May or may not have preconceived ideas

5	Curriculum	Fixed and pre-decided subjects. Students should adopt themselves to the curriculum offered.	No fixed curriculum and it is flexible to meet the diverse needs and demands of farmers	On the spot learning
6	Teaching	Is more formal with classrooms, prescribed textbooks and examinations	Is more informal without any fixed venue and textbook timings and examinations, it is specific and problem oriented	No teacher (Self-learning)
7	Mode of Instruction	Vertical- from teacher to student- more instructive in nature	Horizontal in nature	
8	Method of learning	Starts with theory followed by practical	Starts with practical and go on to theorize	Self learning
9	Teacher	Is older and experienced than the learners	Maybe younger and inexperienced than the learners	No teachers
10	Knowledge flow	Vertical in nature	Horizontal in nature	
11	Evaluation	More formal in the form of marks, grades, etc.	A more informal evaluation	
12	Approach	Deductive	Inductive	
13	Degrees and Diplomas	Will be awarded	No degrees and diplomas are awarded both as this non-formal education develops certificates may be given as recognition of acquired skill	No degrees and diplomas will be awarded
14	Orientation	Board based and general in nature	Specific to situation	
15	Nature of Education	It aims at developing learners physical and mental faculties In the institutional education, the knowledge and to	This is aimed at developing Knowledge, attitudes, and skills in the learners pertaining to specific subjects By extension	

		some extent skills of students is increased	education, the human behavior is changed	
16	Duration	It is a time bound program	Free of regimentation, participatory in nature	
17	Place of teaching	Learning takes place within the four walls of the institution	Learning in real life situation –in villages and fields	
18	Need orientation	It has definite program and does not run according to the needs of the students	Yet, according to the needs of the people and availability of resources	
19	Problem solving	Problems of the students are solved by the teacher	Problems of the people are saved by the people	

Source: Education and Communication Development, Second Edition, Oxford and IBH Publishing Pvt. Ltd, Calcutta.

1.7.1. EXTENSION EDUCATION

The term extension has its origin in the Latin word, tensio, meaning, stretching and ex, meaning out. The literal meaning of extension is stretching out. The extension is education, and its purpose is to change the attitude and practices of people with whom the work is done. Thus the term 'Extension Education' means that type of education, which is 'stretched out' into the villages and fields beyond the limits of the schools and colleges to which the formal type of education is normally confined. The common use of the term, university extension, was first recorded in the 1840s, in Britain. The initial practical steps were taken in 1867-68 when James Stuart, Fellow of Trinity College, Cambridge, gave lectures to women's associations and working men's clubs in the north of England. James Stuart is often considered the 'Father of University Extension'. In 1871, Stuart approached the authority of Cambridge University, to organize centers for extension lectures under the university's supervision. Cambridge formally adopted the system in 1873 and was followed by London University in 1876 and Oxford University in 1878. By the 1880s, the work was being referred to as 'the extension movement'. In this movement, the university extended its work in those beyond the campus. The present form of Agricultural extension was primarily situated in the USA in 1908, where Roosevelt, then the President of America appointed a Country Life Commission to find out the reasons for migration of people from agricultural areas to

the urban area so their migration can be stopped from engaging them in agriculture and agricultural development activities.

In India, extension primarily started with Gurgaon project, which was organized by F.L. Brayne in 1920. The university extension gained momentum for the establishment of the State Agricultural Universities (SAUs) on the pattern of Land-Grant colleges in the US. The first SAU was established in Pantnagar in 1960, and, as of 2010, there are now 45 SAUs in the country. These universities have the statewide responsibility for extension education and have integrated teaching, research, and extension at all levels, i.e., individual, department, college, and university. The University Grants Commission of India has recognized extension as the 3rd dimension, equivalent to teaching and research, in its landmark policy framework in 1977. With this policy, the extension has emerged as a 3rd major function of universities in general, and of agricultural universities in particular. This policy framework also led in the establishment of departments or centers of adult and continuing education allied extension in general universities. IGNOU has as well started the Centre for Extension Education, and the School of Extension and Development Studies.

1.8. DEFINITION OF EXTENSION EDUCATION

- Extension Education is a two-way channel; it brings scientific information to the village people and also takes the problems of the village people to the scientific institution for a solution. It is a continuous educational process, in which both learner and teacher contribute and receive. – **B. Rambhai (1958)**
- Extension education is an applied science consisting of content derived from research, accumulated field experiences, and relevant principles drawn from the behavioral science synthesized with useful technology into a body of philosophy. Principles, content, and methods focused upon the problems of out of school education for adults and youth - **J.P Leagans (1961)**.
- Extension education is the process of teaching rural people how to live better by learning ways that improve their farm, home and community institutions - **J.P Leagans (1961)**.
- Extension is a program and a process of helping village people to help themselves, increase their production and to raise their general standard of living. - **D. Ensminger (1961)**.
- Extension is the increased dissemination of useful knowledge for improving rural life. -**H.W Butt (1961)**.

- Extension work is an out-of-school system of education in which adult and young people learn by doing with a partnership between the Government and the people, which provides services and education designed to meet the people with a fundamental objective of development of the people - **Kelsey and Hurtle (1963)**.
- Extension education is defined as an educational process to provide knowledge to the rural people about the improved practices in a convincing manner and help them to take a decision on their specific local conditions - **O. P. Dahama (1973)**.
- Agricultural Extension is a professional method of non-formal education aimed at inducing behavioral changes in the farmers for increasing their income through increased production and productivity by establishing firm linkages with research for solving farmer's problems, ensuring adequate and timely supply of inputs and using proven methods of communication for speeding of the process of diffusion and adoption of innovations." – **Y. C. Sanoria (1986)**
- Extension involves the conscious use of communication of information to help people form sound opinions and make good decisions - **Van den Ban and Hawkins (2002)**.

From the above definitions, it can be affirmed that "Education is a process which brings desirable changes in behavior (Knowledge, skill, and attitudes) which brings of rural people to improve their social, economic and psychological status". The behavior refers to anything the individual does. According to Leagans (1961), behavior refers to what an individual knows (knowledge), what he can do (skills-mental and physical),

What he thinks (attitudes) and what he actually does (action). Behavior is, therefore, a function of the person in the interaction of the situation. The factors motivating behavior either in the person or situations are: An environmental determinant and the internal urge, wish, feeling, emotion, drive, instinct, need, want, desire, demand, purpose, interest, aspiration or motive, which gives rise to the action and the incentive or goal which attracts or repels an organism.

1.9. DIFFERENCE BETWEEN FORMAL EDUCATION AND EXTENSION EDUCATION

Table 1.2: Formal Education and Extension Education

Sl. No	Formal Education	Extension Education
1.	Teaching is mostly confined to the premises of the institution.	Teaching is mostly outside the four walls of the institution.
2.	The learners are homogeneous with common goals.	The learners are heterogeneous and have diverse goals.
3.	Strict adherence to institutional norms and no free choice for the learners.	Freedom and choice of subject matter left to the learners.
4.	There is a definite curriculum, after completion of which the students are examined and degrees are awarded.	There is no definite curriculum, flexible depending on the needs of the learner. No examination and no degrees are awarded
5.	Knowledge flows from the teacher to the learner.	The extension agent also learns from those whom he teaches.
6.	The teacher only instructs the students.	The extension agent teaches a great deal through local leaders.
7.	Education starts from theoretical and works up to the practical.	Education starts with practical and develops into theoretical aspects.

Source: <https://www.scribd.com/.../Difference-Between-Formal-Education-and-Extension-Edu...>

1.10. WHY THE EXTENSION?

You cannot apply yesterday's methods today and be in business tomorrow. Present day needs to be obvious, especially for the agriculture predominant in rural economy with its major component of agriculture, to keep the methods with the brisk changes characteristic of modern times. In other words, the rural people should know and adopt useful research finding from time to time, and also transmit their problem to the research workers for a solution.

The researchers neither have the time nor are they equipped for the job of persuading the villagers to adopt scientific methods and to ascertain from them the rural problems. On the other hand, it is impracticable for the millions of farmers to visit the research stations and learn things by themselves. Thus, an agency is required to bridge the gulf between the research workers and the people at large, to play the dual role of interpreting the results of research to the farmers (in such a way that they accept and adopt the recommendations) as well as conveying the farmers' problems to the research

stations for solutions. This agency is termed 'Extension', and the personnel managing this agency/organization are called extension workers.

To equip the prospective extension workers for their job, it is necessary for them to be trained adequately in the formal "teaching institutions." Accordingly, we find that three kinds of interrelated services are essential in the process of rural development.

RESEARCH CENTER ↔ PROBLEMS OF PEOPLE ↔ EXTENSION PERSONNEL

1.11. WHY STUDY EXTENSION?

To be successful, an extension worker should know not merely 'what' to teach, but 'how' to teach people. In other words, it is not enough if he is equipped with the technical knowledge in the subject matter field, he should have the ability to successfully communicate his ideas to the people, taking the personnel, social and situational factors into consideration.

The following quotation aptly illustrates the need to study the subject extension...

The captain of a ship has to know not only his ship and the destination he wants to reach. He must also understand ocean currents and tides and the mind systems of the world. All of these are powerful forces, which can help him. The extension worker needs to understand not only his own programs and objectives, but also the currents of thoughts in the minds of the people with whom he lives and works. He needs to understand the motives of men; why certain people take to new ideas more rapidly than others, why certain people seek to take the lead and why certain others hesitate. Light is thrown on many such questions by the knowledge accumulated by the social sciences.

Knowing that much has been discovered about, currents and winds, no captain will venture out neither without providing himself with that knowledge nor without continuously studying. Similarly, the extension worker, aware of how much is and how very much more is yet to be known about the behavior of people will see that this kind of knowledge is essential to him. He will know that there are dependable currents in village life, which can carry people ahead rapidly, and he can look for them, confident that they can be found. He will recognize that some of his obstacles are like hidden rocks which he had better to avoid rather than try to drive the ship of his program straight across them.

This kind of knowledge is the field of study of psychology, anthropology and based on them of educational theory, unfortunately. Our scientific knowledge of people in