

Solanaceous Crop Cultivator

(Job Role)

Qualification Pack: Ref. Id. AGR/Q0402
Sector: Agriculture

Textbook for Class X



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NCERT

राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

FOREWORD

The National Curriculum Framework (NCF)–2005 recommends bringing work and education into the domain of the curricula, infusing it in all areas of learning while giving it an identity of its own at relevant stages. It explains that work transforms knowledge into experience and generates important personal and social values, such as self-reliance, creativity and cooperation. Through work, one learns to find one's place in society. It is an educational activity with an inherent potential for inclusion. Therefore, an experience of involvement in productive work in an educational setting will make one appreciate the worth of social life and what is valued and appreciated in the society. Work involves interaction with material or people (mostly both), thus, creating a deeper comprehension and increased practical knowledge of natural substances and social relationships.

Through work and education, school knowledge can be easily linked to learners' life outside the school. This also makes a departure from the legacy of bookish learning and bridges the gap between the school, home, community and workplace. The NCF–2005 also emphasises Vocational Education and Training (VET) for all those children, who wish to acquire additional skills and seek livelihood through vocational education after either discontinuing or completing school education. VET is expected to provide a 'preferred and dignified' choice rather than a terminal or last resort option.

As a follow-up of this, NCERT has attempted to infuse work across subject areas and contributed in the development of the National Skill Qualification Framework (NSQF) for the country, which was notified on 27 December 2013. It is a quality assurance framework that organises all qualifications according to the levels of knowledge, skills and attitude. These levels, graded from one to ten, are defined in terms of learning outcomes, which the learners must possess regardless of whether they are obtained through formal,

non-formal or informal learning. The NSQF sets common principles and guidelines for a nationally recognised qualification system, covering schools, vocational education and training institutions, technical education institutions, colleges, and universities.

It is under this backdrop that Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal, a constituent of NCERT, has developed learning outcomes based modular curricula for vocational subjects from Classes IX to XII. This has been developed under the Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education of the Ministry of Education, erstwhile Ministry of Human Resource Development.

This textbook has been developed as per the learning outcomes based curriculum, keeping in view the National Occupational Standards (NOSs) for the job role and to promote experiential learning related to the vocation. This will enable the students to acquire necessary skills, knowledge and attitude.

I acknowledge the contribution of the development team, reviewers and all institutions and organisations, which have supported in the development of this textbook. NCERT welcomes suggestions from students, teachers and parents, which would help us to further improve the quality of the material in subsequent editions.

New Delhi
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HRUSHIKESH SENAPATY
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ABOUT THE TEXTBOOK

Agriculture is an important part of India's economy, which accounts for about 18% of the country's GDP and occupies almost 43% of India's geographical area. The agriculture industry employs a large number of people in the organised, as well as, the unorganised sector. The requirement of skilled workforce in this sector is increasing by the day. Skilled manpower for various job roles, such as solanaceous crop cultivator, floriculturist (open cultivation), floriculturist (protected cultivation), gardener, micro irrigation technician, etc., are in demand.

A solanaceous crop cultivator specialises in the cultivation of solanaceous crops as per the practices recommended for a particular agro-climate zone, type of soil, rainfall pattern and climatic conditions to achieve the desired yield. This textbook for the job role of a 'Solanaceous Crop Cultivator' has been developed to impart knowledge and skills through hands-on learning experience, which forms a part of experimental learning. It focuses on the learning process of an individual. Therefore, the learning activities are student-centred rather than teacher-centred.

The textbook has been developed with contributions by subject experts, vocational teachers, industry experts and academicians. Adequate care has been taken to align the content of the textbook with the National Occupational Standards (NOSs) for the job role so that the student acquires the necessary knowledge and skills as per performance criteria mentioned in the respective NOS of the Qualification Pack (QP). The textbook has been reviewed by experts so as to ensure that the content is not only aligned with the NOSs but is also of high quality. The NOSs for the job role of a Solanaceous Crop Cultivator covered through this textbook are as follows:

1. AGR/N0402: weed control and management in vegetable crops
2. AGR/N0403: integrated pest and disease management in vegetable crops

3. AGR/N0404: irrigation management in vegetable crops
4. AGR/N0410: harvest and post-harvest management in solanaceous crops
5. AGR/N9901: basic farm management
6. AGR/N9902: assimilating market information

Unit 1 of this textbook introduces irrigation management in vegetable crops. Unit 2 focusses on weed control and management in vegetable crops. Unit 3 deals with integrated pest and disease management in vegetable crops, while, Unit 4 focusses on harvest and post-harvest management in solanaceous crops. Unit 5 deals with basic farm management.

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Do You Know

According to the 86th Constitutional Amendment Act, 2002, free and compulsory education for all children in 6-14 year age group is now a Fundamental Right under Article 21-A of the Constitution.

EDUCATION IS NEITHER A PRIVILEGE NOR FAVOUR BUT A BASIC HUMAN RIGHT TO WHICH ALL GIRLS AND WOMEN ARE ENTITLED

*Give Girls
Their Chance !*

