

Solanaceous Crop Cultivator

(Job Role)

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

Textbook for Class IX



17902

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NCERT

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FOREWORD

The National Curriculum Framework–2005 (NCF–2005) recommends bringing work and education into the domain of the curricular, 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 the 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 society. Work involves interaction with material or other 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 the workplace. The NCF–2005 also emphasises on Vocational Education and Training (VET) for all those children who wish to acquire additional skills and/or seek livelihood through vocational education after either discontinuing or completing their 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 the subject areas and also 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 levels of knowledge, skills and attitude. These levels, graded from one to ten, are defined in terms of learning outcomes, which the learner 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 the 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 Human Resource Development.

This textbook has been developed as per the learning outcomes based curriculum, keeping in view the National Occupational Standards (NOS) 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 the institutions and organisations, which have supported in the development of this textbook.

NCERT would welcome suggestions from students, teachers and parents, which would help us to further improve the quality of the material in subsequent editions.

New Delhi
June 2018

HRUSHIKESH SENAPATY
Director
National Council of Educational
Research and Training

ABOUT THE TEXTBOOK

Agriculture is an important part of India's economy, which accounts for about 18 per cent of country's GDP and occupies almost 43 per cent 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. The various job roles, such as Solanaceous Crop Cultivator, Tuber Crop Cultivator, Floriculturist-open cultivation, Floriculturist-protected cultivation, Micro Irrigation Technician, etc., are in high demand by States for preparing skilled manpower.

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 the contribution of 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/N0408 — Seed selection and seedling production
2. AGR/N0409 — Soil preparation and transplanting in solanaceous crops
3. AGR/N0401 — Soil nutrient management in vegetable crops
4. AGR/N9903 — Maintain health and safety at a workplace

Unit 1 of the textbook introduces horticulture and its importance. Unit 2 focuses on seed selection and seedling production. It includes important varieties of solanaceous crops, nursery bed preparation and seed sowing. Unit 3 deals with field preparation and transplanting in solanaceous crops, whereas, Unit 4 focuses on the soil nutrient management in vegetables crops. It includes macro and micro-nutrients present in soil and different manures and fertilisers that can be used in vegetable crops. Unit 5 deals with the occupational health, hygiene and first aid practices that have to be followed in a farm.

We hope this textbook will be useful for students and teachers, who opt for this job role. Suggestions for improving this textbook are welcome.

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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 !*

