

Project summary

Improving agricultural education in Afghanistan



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To support and revitalise the agricultural sector in Afghanistan, Wageningen Centre for Development Innovation (CDI), together with its Afghan partners, work to improve agricultural vocational education.

Rebuilding agricultural education

Over 30 years of war have heavily damaged the agricultural sector and have resulted in hardly any agricultural education provision in Afghanistan. When the ATVET (Agricultural Technical and Vocational Educational Training) project started in 2011, there were about 30 agricultural high schools available to teach grades 10-12 using widely varying materials and outdated textbooks. The project has therefore worked on updating the national agricultural high school curriculum, developing new teaching materials, and training teachers to use them.

The number of schools has in 2017 reached around 160 throughout Afghanistan. These vary in how well equipped they are, so the project is now providing direct support to the schools that require equipment, furniture and other resources.

The Agricultural High Schools (AHSs) are getting an extra capacity boost through training of new teachers and through in-service training, which began in 2016. Potential teachers are trained at the National Agriculture

Wageningen Centre for Development Innovation (CDI) is the knowledge broker of Wageningen University & Research. We foster and contribute to sustainable and inclusive food systems through actions in four specified and interlinked focus areas: Agriculture and Markets, Climate and Environment, Food and Nutrition, and Governance and Partnerships. Our staff has the unique combination of substantive knowledge, an international network and excellent process management qualities.

Education College (NAEC) that the project established in 2012 in the capital, Kabul. The curriculum of NAEC consists of two years of teacher training aimed specifically at teaching at agricultural high schools. Students also get extra skills training in agribusiness development, rural development (including a focus on gender issues), animal and plant sciences, as well as IT and English, which give them the possibility to market themselves in other agricultural fields. The core of the teaching staff of NAEC is formed by Afghan nationals who followed a master's degree programme at Van Hall Larenstein University of Applied Sciences, in the Netherlands.

Title: Agricultural technical and vocational educational training

Start: 1 November 2011

End: 1 November 2021

Client(s): Netherlands Ministry of Economic Affairs and Netherlands Ministry of Foreign Affairs

Budget: 23,7 million Euro

Partners: Afghan Deputy Ministry of Technical Vocational and Educational Training (DMTVET), the National Agricultural Education College (NAEC) and Agromica



The main building of the new NAEC premises

NAEC's first class of 100 young men from all over Afghanistan led to 80 graduates in December 2013. The second year attracted twice as many students, and included a small group of women from the Kabul area entering Grade 13. In 2014, the number of incoming students grew again grown by 100, to total 300 new students - of whom 30 were women. Teaching is one of the few career options for women, but since few girls attend agricultural high schools, this group needs to be built up slowly over time. As of today (2017), the college has graduated 635 students, 88 of whom were women. The project has financed the construction of new school and dormitory facilities for NAEC to hold a total capacity of 800. The NAEC facilities are found on a compound together with other vocational schools in Kabul. The grounds include agricultural practical learning plots and a greenhouse.

Introduction of new teaching methods

Apart from new teaching materials for agricultural education at the different levels, new teaching methods are being introduced as well. Although agricultural high schools in principal teach practical education, the reality is that a large part of education is still traditional textbook-based teaching by rote methods. This is partly due to a great lack of equipment and teaching material, such as learning plots, tools and water, but cultural factors play an important role as well. Within the



Packing the new Grade 10 AHS textbooks and other materials for all of Afghanistan

The new teaching materials for the agricultural high schools (AHS) and the NAEC have been developed by a team in a Curriculum Development Unit (CDU), with both Afghan and Dutch members. The Afghan members of the

CDU are now running their activities on their own. They are NAEC faculty members, and staff from the government partner, DMTVET. In 2016, piloting of the new materials was completed, and the Grade 10 subjects finalised, supported by feedback from AHS teachers and students at the pilot schools. The development of the AHS teaching materials starts with a number of inputs from the Netherlands, as a basis for a team of writers in Afghanistan to produce student textbooks and accompanying pedagogical instructions for teachers. These are being published in both of Afghanistan's official languages, Dari and Pashto. Once teachers have been trained to use the materials, and adjustments have been made based on testing results, the textbooks and instruction booklets will be distributed to all agricultural high schools in the country.

Building capacity at the Agricultural High Schools

Early in 2017, the Grade 10 materials were completed for the AHSs, in time for the new year starting in March in the cold area provinces and August in the warm areas. Building on the last years' experience of working with ten pilot schools covering both areas, an **in-service training programme** was designed. There are now almost 1,000 teachers working in the 160 schools, so the programme must be organised well. During the first four-week course, the teachers (and some principals) stay on the NAEC premises during the school holidays. The course covers pedagogical principles of interactive, student-centred teaching, and introduces the new materials.

Some practical lessons are also introduced to let the teachers practise the tools given in the Teachers Instructions accompanying the textbooks for each subject. The first training included 350 teachers from the cold area schools and took place in February and March 2017. The training for the warm area teachers started in July. The in-service training programme will run until 2019, every year inducting teachers in the use of the new AHS materials for that year, covering Grade 11 subjects in 2018 and Grade 12 in 2019.

In 2015 the project started rolling out **direct support** in the form of equipment (for laboratory and field work), furniture and other resources to the ten pilot schools. These materials support the use of the new curriculum and are primarily focused on facilitating practical



education. Most materials are low tech and/or require no operational funding for maintenance, as both the size of the operational budget as well as the autonomy of schools to apply it remain problematic. This project component will continue until 2018, by which time well over 100 schools will have received similar support.

EDU4FEM

Agricultural education of girls is a major objective of this project, a challenge in such a patriarchal context. Gender awareness is a theme that is being addressed by the curriculum, both at NAEC and in the AHS. Encouraging girls to attend the schools and the need to increase the number of female AHS teachers to provide role models has been addressed in different ways by the project. At NAEC, an intensive course was designed to attract women graduates from General High schools to get their agricultural knowledge and skills up to a level needed to be able to sit the entrance exam to enter NAEC. The college created conditions to make women's attendance

more comfortable through a bus to pick them up from home, separate classes and a women's dormitory.

This has led to some results, but the problem is that women teachers generally come from the Kabul area, and therefore do not take up positions at agricultural high schools in the regions. In-service training of female AHS teachers (who make up 12% of the schools according to a Baseline study of 72 AHSs in 19 provinces) is how the project is currently improving capacity of the teachers already at the schools, but it remains a challenge to attract more teachers in the different regions. To address this, the project is looking for funding to pilot the "EDU4FEM" study which will try out a number of innovative methods to extend AH education to women in the provinces. The proposed pilot combines distance learning with regular on-site training, and takes into account cultural and social sensitivities by explicitly including male decision makers and making the benefits of female education tangible to them.



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