SMALL-SCALE SEED ENTERPRISE

Start-up and Management

Guidelines & Business Skills for Seed Producers in Afghanistan

Ministry of Agriculture, Irrigation and Livestock
&
Food and Agriculture Organization of the United Nations, Kabul, Afghanistan.
SMAL-SCALE SEED ENTERPRISE

Start-up and Management

By

Sam Kugbei

Illustrated by Henry Babatunde Ogunlaiye

Ministry of Agriculture, Irrigation and Livestock
&
Food and Agriculture Organization of the United Nations,
Kabul, Afghanistan.
## Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>iv</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>vi</td>
</tr>
<tr>
<td>Introduction</td>
<td>vii</td>
</tr>
<tr>
<td>1 What is a Seed Business?</td>
<td>1</td>
</tr>
<tr>
<td>2 Getting ready to start</td>
<td>9</td>
</tr>
<tr>
<td>3 Understanding costs and benefits in seed production</td>
<td>29</td>
</tr>
<tr>
<td>4 Making your business plan</td>
<td>40</td>
</tr>
<tr>
<td>5 Planning your seed production</td>
<td>63</td>
</tr>
<tr>
<td>6 Cleaning, treating, packaging and storing your seed</td>
<td>70</td>
</tr>
<tr>
<td>7 Testing the quality of your seed</td>
<td>77</td>
</tr>
<tr>
<td>8 Promoting and selling your seed</td>
<td>85</td>
</tr>
<tr>
<td>9 Managing your seed enterprise</td>
<td>95</td>
</tr>
<tr>
<td>10 Looking into the future</td>
<td>113</td>
</tr>
<tr>
<td>Summary</td>
<td>131</td>
</tr>
<tr>
<td>Glossary</td>
<td>132</td>
</tr>
</tbody>
</table>
Foreword

The Food and Agriculture Organization of the United Nations (FAO) gives a particular attention to seed industry development in developing countries as part of its mission of freeing the world from hunger. Since 1982, FAO has had a continuous history of involvement in the seed sector of Afghanistan, which has resulted in the implementation of several seed projects in close partnership with the Ministry of Agriculture and funding from countries including The European Union, Germany, Japan, The Netherlands, Sweden and Switzerland.

However, up to 2003, a greater attention was given to variety development and the technology of seed production mainly in the public sector. With limited success in this area, a change in direction became necessary following the establishment of a democratic government after a long period of conflict. It is for this reason that the current European Union funded project of euro 10 million for Variety and Seed Industry Development focuses on commercialization of the seed industry as a means of attracting private interest and investment into this area. This project is being implemented jointly by FAO and the Ministry of Agriculture, Irrigation and Livestock (MAIL), and has played a leading role in the preparation of a National Seeds Policy that was adopted recently in Afghanistan and a seed law that is being considered for enactment.

In 2004, the MAIL/FAO/EC seed project promoted the establishment of eight pilot private seed enterprises by groups of farmers in five provinces of Afghanistan. These enterprises which are now in their third year of operation demonstrate a
great potential and are expected to account for about 60% of the total quality wheat seed supply for farmers during the 2007/08 season. However, there is a pressing need for training the new producers in the technical aspects of seed production and more importantly in the business management aspects of these enterprises and any future ones that may emerge.

This handbook is developed as a guide for the much needed training required by the new small-scale seed enterprises. It focuses on developing entrepreneurial skills and attitudes among farmer groups in Afghanistan who are or will be interested in establishing private seed businesses. The contents of this book have been field tested during informal training sessions in farming communities and were highly appreciated by staff and farmers. For nationwide use in Afghanistan, the handbook has been translated into Dari and will later be translated into Pashto.

It is hoped that this handbook will help to promote further interest in commercial seed production among national authorities, donors and farming communities, and hence contribute to increased crop productivity, farm incomes, food security and freedom from hunger in Afghanistan and other developing countries around the world that would find the book useful.

Tekeste Ghebray Tekie
FAO Representative in Afghanistan
The production of this handbook has been made possible by funding from the European Union through implementation of the Afghanistan Variety and Seed Industry Development (GCP/AFG/045/EC) project by the Food and Agriculture Organization of the United Nations (FAO) and the Afghanistan Ministry of Agriculture, Irrigation and Livestock (MAIL).

For the successful production of this handbook, many thanks go to:

- Messrs Mir Shafiuddin Mirzad, Abdullah Hakimi and Shahabuddin Shahab for translating the book into the Dari language.

- Other project staff who contributed to this publication through their valuable inputs, comments and suggestions at different stages during the preparation of the manuscript.

- The seed producing enterprises and many farmers, whose knowledge and experiences are reflected in this handbook.

- Mr. Henry Babatunde Ogunlaiye (Illustration Consultant), for his valuable contribution and key role in creating the many interesting illustrations as a means of putting the several technical messages into context.
This handbook has been prepared in response to requests for training and guidance in seed production and seed business management by members of eight pilot group enterprises that have been established under the FAO seed programme in Afghanistan. The material in the book has therefore been put together and written for farmers who have little knowledge of formal seed technology or experience in managing private businesses.

The handbook is presented in ten chapters. Since it is intended for training purposes, each chapter is supplemented by exercises that are meant to provoke discussion and brainstorming in the training sessions.

Chapter 1 explains what a seed enterprise means, and draws the farmers' attention to those additional specialized activities they need to undertake in order to produce good seed crops. The main aim of this chapter is to make sure the enterprise members understand clearly that the purpose of a seed enterprise is to produce good seed, which they can sell and make money.

Once the business concept is understood, Chapter 2 then explains the various factors that need to be taken into account in getting ready to start a seed enterprise. These include personal attributes, choice of business structure, crop and variety considerations, money and resources needed, and analysis of risks.
Chapter 3 uses numerical examples to define and explain the various costs that are usually involved in seed production and how these arise. The production cost is then compared with the expected revenue from seed sales to determine the level of profit.

Chapter 4 focuses on making the business plan and provides examples of key sections of a business plan for a hypothetical seed enterprise. The participants are expected to follow these examples and explanation in formulating their own business plans.

Chapter 5 discusses production planning and activities to be carried out in the field up to the time of harvesting. These include choice of contract growers and land for seed production, use of early generation (foundation) seed, crop husbandry practices, roguing or removal of unwanted plants, field inspection, harvesting and threshing.

Necessary post harvest activities including seed cleaning and treatment, packaging and storage are explained in Chapter 6. These operations transform the seed from the raw to the processed product and prepare it for marketing.

Chapter 7 explains the sampling and testing of all seed lots before they are delivered to customers. The quality results from the seed testing laboratories will serve as guarantee for both the enterprises and the customers.

Chapter 8 discusses the various techniques that enterprises should use in promoting their seed to potential buyers. The enterprises should understand that they must sell the seed they produce and be proactive in seeking and influencing the market for their seed.

Chapter 9 outlines all the management issues involved in
running a seed enterprise on a day-to-day basis including internal organization, recording, monitoring and evaluation. Examples are provided of entries that should be made in the various records.

Finally, Chapter 10 discusses aspects related to future growth of the enterprise and challenges to be expected. Methods of business expansion and joining forces to form seed associations are also explained.

It is hoped that at the end of these ten chapters the participants would have a good understanding of basic seed production techniques and skills they need to run their enterprise successfully and also retain the handbook for reference.