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# **AgroSpecial 4**

## **Evaluation Agrodok Questionnaires**

**An overview of all questionnaires used during the period  
1985-2001**

**A.T. Vink  
R. van Zijverden**

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## **EVALUATION AGRODOK QUESTIONNAIRES**

### **Preface**

The Agromisa Foundation (Wageningen, The Netherlands), publishes a series of 'how to' booklets (Agrodoks, generally referred to as AD s in the report) on agricultural subjects, jointly with CTA (Centre Technique Agricole, Wageningen).

In order to elicit response from Agrodok recipients, questionnaires have been inserted into the booklets from time to time, most notably during the period 1998 – 2001.

At the request of Agromisa a volunteer undertook a systematic review of 800 returned questionnaires from early 2004, a task concluded around mid-2006. Another co-author analyzed the returned questionnaires on AD 32, Beekeeping, in detail, testing the possible application of SPSS (formerly Statistical Package for the Social Sciences) statistical analysis.

The present report is the outcome of the review.

The included CD-Rom contains background information and questionnaire compilations used in the review.

The authors wish to thank staff and volunteers of Agromisa for their co-operation and support in preparing the report.

Wageningen, December 2006

A.T. Vink  
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## Summary

The report Evaluation Agrodok Questionnaires briefly describes the analysis of 800 returned questionnaires, inserted into English Agrodoks (AD s) distributed during 1998-2001 (Ch. 1, Annex 2.3.1).

AD s are practical technical booklets on agricultural subjects, intended for farmers, trainers, extension officers, etc. in the third world, more specifically Africa. They are published jointly by the Agromisa foundation and CTA, Wageningen (Ch. 1.2, Annex 1).

In order to place the evaluation in perspective, earlier efforts at organized feedback from the target audience are discussed (Ch. 1.3, Annexes 2.1, 2.2).

The evaluation method developed is described in Ch. 2, for the benefit of others, who might want to extract information from (the) questionnaires in future. It comprises condensing information from the 17-question questionnaire into Excel format, then summarizing the data into Word files, both separately for each AD (Ch. 2, Annexes 2.3.2, 3.1, 3.2).

Conclusions and recommendations, placed centrally in the report (Ch. 3) confirm that AD s do not reach their intended audience, small farmers, but rather intermediaries, like extension officers, teachers/ trainers, project staff members, etc.

It is recommended that eliciting audience feedback through questionnaires be continued, though the actual questionnaire needs some adaptations. Returned questionnaires should be acknowledged and be entered promptly into a data retrieval system; Agromisa/ CTA must decide whether or not they will make time and funds available to do so.

A question by question discussion (Ch. 4) presents questionnaire information systematically, as basis for the conclusions and recommendations of Ch. 3.

Ch. 5 analyses the 111 replies to the AD 32, Beekeeping in the tropics in more detail, concluding that SPSS statistical analysis does not contribute to a better insight than a frequency analysis with Excel.

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## EVALUATION AGRODOK QUESTIONNAIRES

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## **1. INTRODUCTION**

### **1.1 Structure of the report**

This report analyzes a number of returned questionnaires, inserted in Agrodoks during the period 1998-2001. Its objectives – gradually becoming clearer during the course of the evaluation – were:

- Are questionnaires a suitable way of organizing feedback from users.
- If so: how might they be improved to better serve their purpose.
- For which groups (publisher, editors, and illustrators) are the replies relevant.
- How may questionnaire data be presented to best serve these groups.
- Can SPSS statistical analysis be a tool in questionnaire evaluation.

In order to place the analysis and its results in context, the report briefly describes Agromisa's Agrodok series of practical 'how to' booklets in agriculture (par. 1.2). Earlier efforts at organized feedback from the booklets' users through questionnaires are listed in historical order, with their salient conclusions (par. 1.3.1 and 1.3.2).

An analysis of 800 returned questionnaires, of the type inserted in the (English edition only) Agrodoks published or reprinted during the period 1998-2001, constitutes the main body of the report (par. 1.3.3 and Ch. 2).

Questionnaire evaluation procedure is explained at some length, so future evaluators do not have to re-invent the wheel, but may concentrate on improving its construction and functioning (Ch. 2).

The study gained momentum through the cooperation of co-author R. van Zijverden, who analyzed response to Agrodok 32, Beekeeping in the tropics, in detail, testing the possible application of SPSS statistical analysis in questionnaire evaluation (Ch. 5).

Main conclusions and recommendations are placed centrally in the report (Ch. 3). Evaluation results of the 800 questionnaire replies, and of the case study analysis of Agrodok 32, on which conclusions and recommendations are based, follow in Chapters 4 and 5.

Most descriptions, tables and graphs produced during the evaluation are in the CD ROM accompanying this report, some are in the Annexes, and only a few, considered essential for the conclusions and recommendations, are in the main text.

### **1.2 The Agrodok Series**

Paraphrasing the Agromisa leaflet "Agromisa Publications - Agrodoks" (latest edition 2006, see Annex 1.1): The Agromisa Foundation, a knowledge centre for small-scale and sustainable agriculture in the tropics – established in 1934 and linked to Wageningen University and Research Centre WUR – aims to exchange knowledge and experience on agriculture and related topics.

The Agrodok series (henceforward referred to as AD) is a series of publications on agriculture, co-published by Agromisa and CTA (Centre Technique Agricole, Wageningen). The booklets (format A5, 70 - 100 pages) are aimed at people working in small-scale agriculture in the tropics. They provide a brief general background on agricultural topics and explain practical applications.

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All Agrodoks are published in English (E), French (F) and Portuguese (P). Some are translated into Spanish (S) as well.

Agrodoks are published in 5 categories or subject groups:

| Category no. | Category                  | No. of titles |
|--------------|---------------------------|---------------|
| 1            | Animal Production         | 12            |
| 2            | Plant Production          | 13            |
| 3            | Food Processing           | 6             |
| 4            | Soil, Water & Environment | 6             |
| 5            | Economics                 | 2             |

### 1.2.1 Feedback

Agrodoks are revised regularly, to incorporate newer insights and better serve the target audience. For that reason Agromisa welcomes reactions from readers, in order to update AD contents and ensure its relevance for the users. Contact with AD users normally depended on replies or requests from the readers or incidental contacts during field visits of Agromisa staff members.

Readers' feedback was formalized through questionnaires during 3 periods in the Agrodok history.

#### 1. Questionnaire 1985 – 1995.

A question-page with questions on clarity and completeness of text and illustrations, inserted only in Agrodoks 20 and 34, roughly during the period 1985 – 1995. See Annex 2.1.

#### 2. Archive research & questionnaire.

A study by van der Vliet, A., 1997, extension student at the Wageningen University. It included an elaborate, 37-question questionnaire. See CD ROM, and translated Summary of her Report, Annex 2.2.

#### 3. Questionnaire 1998 – 2001.

A 17 – question questionnaire, developed by Agromisa and CTA, inserted into the (*English*) AD s printed between about 1998 and 2001. It has been discontinued in Agrodoks published or reprinted after about 2001. See Annex 2.3.1.

## 1.3 Questionnaires

### 1.3.1 Questionnaire 1985 – 1995

According to the extension study (published 1997, see par. 1.2.2 and Annex 2.2) this brief questionnaire was only included in Agrodoks 20 (Rabbit farming) and 34 (Hatching eggs), apparently in both the English and the French editions. It consists of 11 questions, grouped into 7 headings:

- 
- (1) Overall opinion on the Agrodok.
  - (2) Irrelevant or insufficient information.
  - (3) Most and least clear (sub) chapters.
  - (4) Most and least clear pictures.
  - (5) Most and least useful (sub) chapters.
  - (6) Information contradicted by the respondent's own experience.
  - (7) Remarks.

No questions were included on country of origin, gender, profession(s) or educational status of the respondents, so it is impossible to link response to any of these important characteristics of the Agrodok audience.

Only the actual Agrodok 20 file of replies to the most recent questionnaire does contain a number of (generally positive) replies to the 1985-1995 one, dating from 1990 through 2001, though most are from 1990-1995.

### **1.3.2 Archive research & questionnaire 1997**

At the request of Agromisa Annette van der Vliet, a student of Wageningen University, looked into the question: "Does Agromisa reach its intended target audience – the less privileged rural citizens in the tropics – with its Agrodok series" (Annex 2.2).

From office and/ or sales records she charted Agrodok distribution during the period Jan.1994 through May 1996, both directly by Agromisa (almost 5800, to bookshops, development NGO's and individuals, mainly in Europe) and via CTA (over 31500, mainly sent to Africa and other third-world countries).

CTA sends out Agrodoks at the request of individuals. Their records show the following distribution by profession group during the above-mentioned period (see Table 1.1, below).

A.van der Vliet followed up her archive research with an extensive 37- question questionnaire, designed in consultation with Agromisa and CTA. It was sent out to 1000 recipients of 5 Agrodoks (200 per Agrodok, of which 100 in English and 100 in French), randomly selected from the English, respectively French, addressee records of CTA. Overall response (304 usable replies) was just over 30%.

**Table 1.1**

**Agrodok distribution CTA by profession group, Jan. 1994 through May 1996**

| <b>Profession</b>                 | <b>Number</b> | <b>%</b>   |
|-----------------------------------|---------------|------------|
| <b>Farmer</b>                     | <b>1064</b>   | <b>3</b>   |
| <b>Extension (field) worker</b>   | <b>12493</b>  | <b>40</b>  |
| <b>Officer, manager</b>           | <b>15454</b>  | <b>49</b>  |
| <b>Decision maker, politician</b> | <b>529</b>    | <b>2</b>   |
| <b>Researcher, lecturer</b>       | <b>1975</b>   | <b>6</b>   |
| <b>Total</b>                      | <b>31515</b>  | <b>100</b> |

*(source: van der Vliet, 1997)*



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The five Agrodoks were selected to represent different subjects, lay-outs and sizes:

No. 3, Preservation of fruit and vegetables.

No. 8, The preparation and use of compost.

No. 9, The vegetable garden in the tropics.

No. 11, Erosion control in the tropics.

No. 32, Beekeeping in the tropics.

Results showed Agrodoks to be used mainly in NGO's (37%), followed by households/ farms (29%) and Governmental organizations (19%). Small-scale production Agrodoks like AD 3, Preservation of fruit and vegetables, and AD 9, The vegetable garden, are popular with households and farmers, as shown by table 1.2.

***Table 1.2***

**Response by type of organization, in %. (Questionnaire vd Vliet)**

| <b>Organization type</b>       | <b>AD3</b> | <b>AD 8</b> | <b>AD 9</b> | <b>AD 11</b> | <b>AD 32</b> | <b>All 5</b> |
|--------------------------------|------------|-------------|-------------|--------------|--------------|--------------|
| <b>NGO</b>                     | <b>37</b>  | <b>40</b>   | <b>29</b>   | <b>41</b>    | <b>33</b>    | <b>37</b>    |
| <b>Government organization</b> | <b>19</b>  | <b>27</b>   | <b>15</b>   | <b>20</b>    | <b>22</b>    | <b>19</b>    |
| <b>Commercial enterprise</b>   | <b>2</b>   | <b>3</b>    |             | <b>2</b>     | <b>6</b>     |              |
| <b>Household/ farm</b>         | <b>42</b>  | <b>16</b>   | <b>48</b>   | <b>18</b>    | <b>24</b>    | <b>29</b>    |
| <b>Other</b>                   | <b>2</b>   | <b>11</b>   | <b>5</b>    | <b>17</b>    | <b>9</b>     |              |
| <b>Combination</b>             | <b>7</b>   | <b>3</b>    | <b>3</b>    | <b>2</b>     | <b>6</b>     |              |

Annette van der Vliet compiled her findings in the (Dutch) report "Over kleine boeken voor kleine boeren" (On small booklets for small farmers), see translated Summary, Annex 2.2.

***Salient conclusions from the questionnaire results are as follows.***

Agrodoks have different target audiences because topics vary, e.g. vegetable growing (small scale) vs. erosion control (large scale).

Small farmers do not receive Agrodoks; recipients generally are the intermediaries, like extension officers, teachers/ trainers, project managers or project staff members, and so on (many of them probably farmers as well).

Half of the respondents have obtained a University degree, another quarter has followed vocational education after secondary school.

Most receivers use the booklets to improve their own knowledge, but often the information is applied in extension work or teaching as well.

56% of the respondents did put theory into practice; users were satisfied with the information in most cases.

Annette van der Vliet recommends redefining the Agrodoks' target audience, from small farmers to intermediaries.

### 1.3.3 Questionnaire 1998 – 2001

Partly as a result of the van der Vliet study a new type of questionnaire was developed by staff members of Agromisa and CTA. It consists of 17 questions, most of them with a number of optional replies, see Annex 2.3.1.

These questionnaires were inserted into *the English edition only* of the Agrodoks printed or reprinted between roughly 1998 and 2001. Their use was discontinued after 2001, because returned questionnaires were piling up without being analyzed or acknowledged. They are still included in ADs not revised or reprinted since 2001; incidental replies continue to arrive, directly to Agromisa or via CTA.

No record has been kept of the actual number of English Agrodoks with questionnaires distributed. A rough guess can be made in the manner shown in the following table.

**Table 1.3** Rough estimate of the number of English Agrodoks with questionnaires distributed

|   |              |   |
|---|--------------|---|
| <b>Agrodok titles with English questionnaires</b> | <b>30</b>    |   |
| <b>Number (re)printed per title</b>               | <b>1500</b>  |   |
| <b>Number distributed, estimated at 80%</b>       | <b>1200</b>  |   |
| <b>total questionnaires distributed</b>           | <b>36000</b> |   |
| <b>replies received to mid July 2006</b>          | <b>886</b>   | <b>2.5% of total questionnaires distributed</b> |
| <b>replies included in evaluation</b>             | <b>800</b>   | <b>2.2% of total questionnaires distributed</b> |

Response differs greatly according to AD subject, as illustrated by the overview of replies included in the evaluation in the following table 1.4. (see also Annex 2.3.2).

**Table 1.4** Overview of replies

|                                      |                               |            |                |
|--------------------------------------|-------------------------------|------------|----------------|
| <b>Animal Production</b>             |                               |            |                |
| highest response                     | <b>AD 32, Bees</b>            | <b>111</b> | <b>14%</b>     |
|                                      | <b>AD 33, Ducks</b>           | <b>56</b>  | <b>7%</b>      |
|                                      | <b>AD 4, Poultry</b>          | <b>54</b>  | <b>7%</b>      |
| lowest response                      | <b>AD 1, Pigs</b>             | <b>17</b>  | <b>2%</b>      |
| <b>Plant Production</b>              |                               |            |                |
| highest response                     | <b>AD 17, Tomatoes</b>        | <b>62</b>  | <b>8%</b>      |
| lowest response                      | <b>AD 10, 19, Soy, Trees</b>  | <b>1</b>   | <b>&lt;1 %</b> |
| <b>Food Processing</b>               |                               |            |                |
| highest response                     | <b>AD 12, Fish &amp; meat</b> | <b>25</b>  | <b>3%</b>      |
| lowest response                      | <b>AD 3, Fruit &amp; veg.</b> | <b>2</b>   | <b>&lt;1 %</b> |
| <b>Soil, Water &amp; Environment</b> |                               |            |                |
| highest response                     | <b>AD 11, Erosion</b>         | <b>35</b>  | <b>4%</b>      |
| lowest response                      | <b>AD 27, Village water</b>   | <b>11</b>  | <b>1%</b>      |
| <b>Economics</b>                     |                               |            |                |
|                                      | <b>AD 27, Marketing</b>       | <b>43</b>  | <b>5%</b>      |

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## 2. EVALUATION QUESTIONNAIRES 1998 – 2001

### 2.1 Considerations

The questionnaire contains 17 questions; most of them either with multiple response options or with a request for an open reply (see Annex 2.3.1).

AD: Title, edition year (q. 1).

Respondent: Gender, Country & region of residence, Profession/ occupation, Education (q. 2-4).

AD awareness: How did you come to Know about the AD, for whose Benefit, and How did you obtain it, what Information were you looking for (q. 5-8).

Satisfaction: Subject covered satisfactorily, Language and Illustrations clear and easy (q. 9-11).

Application: Did you apply the information, if Not, why, which Problems did you encounter (q. 12, 13, 14).

Results: Tangible Results of putting the information into practice, for whose Benefit did you use the AD (q. 15 a, 15 b).

Suggestions: Comments on AD, Suggestions for future AD s (q. 16, 17).

#### 2.1.1 Response

Nearly all respondents did reply to questions 1 through 12 by ticking one or more of the available options. Far fewer have answered questions 13 – 17, generally. It is noteworthy that replies to question 13 (AD practices expensive, laborious, unsuitable, etc.) are given without reference to question 12.4. The same holds for question 14, explanation of problems without reference to 12.2, problems encountered.

Replies to question 15.a, benefits are regularly of the type ‘efficiency increased, costs lowered, income raised’ that might apply to almost any AD.

Question 15.b, for whose benefit did you *use* the AD, has been left blank regularly; possibly the distinction between question 6, for whose benefit did you *obtain* it, and question 15.b is not all that clear.

#### 2.1.2 Relevance of replies for the various users of the information

Of special interest for the **producers** of the Agrodoks, Agromisa/ CTA, are the replies to questions 1- 7, 15b and 17.

Characteristics of the target audience with regard to origin, gender, profession(s), education, questions 1 – 4.

Information on the questions how did you come to know about (the) Agrodok(s), how and for whose benefit did you obtain and use it, questions 5 – 7, 15b.

Of interest for the **editors** of Agrodoks are specifically the replies to questions 9 – 14, 16.

What were the Agrodok’s strong and weak points. What results were obtained and/ or what problems were encountered in applying the information. How might contents, text and / or illustrations be improved.

Of interest for both **Agromisa/ CTA** and the **editors** are the replies to question 3, 4, 8 and 15a.

Characteristics of the target audience, more specifically profession(s) and education.

Information needed, question 8.

Results obtained through applying the Agrodok information.

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## 2.2 Evaluation method

### 2.2.1 Questionnaire files (Agromisa)

Agromisa has sorted the returned questionnaires into document files by AD number, in order of arrival. When questionnaire evaluation was started in early 2004 the average file contained about 27 replies, ranging from just 1 or 2 (AD s 3, 10, 19, 29) to over 100 (AD 32, Beekeeping in the tropics). No responses for AD 21, (no questionnaire included), nor for AD s 24 and 35, published after the insertion of questionnaires was discontinued. The files do contain some letters as well as questionnaires; they have been included in the evaluation if sufficient information could be extracted from them.

Apart from being filed, incoming questionnaires were neither acknowledged nor evaluated – for lack of time and funds – though AD editors or revisers might have leafed through them occasionally.

### 2.2.2 Excel files (evaluation)

After trial and error the co-author of this report developed a system for summarizing the questionnaire responses and presenting them in a useful manner to AD revisers. It consists of the following steps, separately for each AD (See example Annex 3.1).

- Manual sorting of the questionnaire forms by region: Africa (West, Central, East, South), Caribbean/ Latin America, Europe, Asia/ Pacific.
- Sorting of forms within regions by country, in alphabetical sequence.
- Sorting within country by date of entry in the Agromisa filing system.
- Sequential numbering of the forms (pencil), to enable users of the evaluation results to link specific remarks or comments with individual respondents.
- Inserting questionnaire data in an Excel spreadsheet, questions in columns, respondents' replies in rows, in numerical order and sorted by region, country, gender and date. Options within multiple-option questions have been numbered, e.g. q. 3.1 – 3.8 (profession), q. 4.1-4.5 (education), etc. See example Annex 3.1.

Replies to questions 2-8 and 9-13, 15b have been ticked by noting 1 in the corresponding columns, to permit summarizing the Excel data. Explanatory remarks have been given next to the entries, or below the tables, where necessary.

Multiple replies to questions 4, Education, and 5, How did you come to know about this Agrodok, have been brought back to one entry in the tables. For example 'Other' education, question 4, (e.g. a post-graduate course) has been omitted if the respondent did already tick the option 'University'. Entries like 'Agricultural College' etc. have been construed as 'Vocational training after secondary school'. Multiple replies to question 5 have likewise been reduced to one entry (usually SPORE).

In the Tables 'Questions 14, 15a' and 'Questions 16, 17' respondents' replies have been summarized in one or two lines. Remarks between inverted commas (e.g. 'excellent booklet') represent the original replies more or less verbatim, though abbreviated where necessary. Remarks without inverted commas paraphrase the original entries in telegram style.

Evaluation Excel files have not been completed for AD s 10, 19 and 29 for which only 1 or 2 questionnaires have been returned, though these few data are included in the summaries and overviews of Ch. 4. No separate Excel files for AD s 16 (2 replies) and 24 (1 very recent answer).

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AD s 23, 28, 30, 35 and 37 and higher are either recent (no questionnaires included) or yet to be published.

### **2.2.3 Word files (evaluation)**

Information from the one-per-AD Excel files described above has been summarized into Word files – again one per AD – for the benefit of editors/ revisers. Replies from the questionnaire forms are presented and discussed separately for each question, with reference to individual respondents where applicable. (See example Annex 3.2).

Multiple answers have been reduced to one, where possible (questions, 4, 5, 7) or categorized into subject groups (questions 14, 15a, 16, 17, e.g. Animal production, Plant production, etc. in question 17, suggestions for future AD s).

Word file summaries have not (yet) been completed for all AD s, because preference has been given to titles under revision.

## **2.3 Presentation of results**

Annex 2.3.2 presents an overview of summaries prepared, number of replies before and after conclusion of the evaluation, and total replies, by Agrodok, in numerical sequence.

Results are briefly discussed in Chapter 4, followed by an in-depth discussion of the evaluation of the questionnaires of Agrodok 32, Beekeeping in the tropics. Ch. 5.

Excel and Word files of AD 2 are reproduced in Annexes 3.1 and 3.2 by way of example.

Annex 3.3 presents a summary of all entries by AD subject group in Excel format.

All other evaluation data are presented in the CD ROM enclosed with this report.

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### 3. CONCLUSIONS AND RECOMMENDATIONS

#### 3.1 Conclusions and recommendations

1. The first conclusion must be that overall *response* to the most recent questionnaire, inserted into the English Agrodoks published or reprinted during the period 1998 – 2001, is disappointingly low: only some 2% of the estimated total quantity of Agrodoks-with-questionnaires distributed. A fact to be taken into account in considering the outcome of the evaluation.

An archive research of the shipping lists of Agromisa and CTA could provide a better indication of the total number of questionnaires distributed. It is *recommended* that this be done.

2. The second conclusion is the confirmation of Van der Vliet's finding (Archive research and Questionnaire, 1996, c.f. Ch. 1.2.2) that Agrodoks do not reach their intended *audience*, people working in small-scale agriculture, but rather the intermediaries (supposedly) working for them: extension officers, teacher/ trainers, project managers/ staff members of rural projects, etc. Of the 795 or so respondents only 41, about 5 %, list 'farmer' as their exclusive occupation. As quite a few members of this group claim a University education they might well be farm managers rather than small farmers. Extension officers, with or without (an)other occupation(s), are the largest group, followed by part time farmers with (an)other occupation(s).

It is *recommended* that Agromisa/ CTA consider the impact of the reconfirmation of the actual character of its target audience on Agrodok editing. Possibly text and illustrations need to be adapted to facilitate their application in extension/ training. This might include modifications like larger illustrations, easily photocopied for hand-outs, insertion of flyers or posters, or sturdier covers to withstand field use, as suggested by several respondents.

3. The third conclusion concerns the *function* of the Agrodok booklets, conceived as simple, technical guidelines on different types of agricultural production, for direct application by the recipient. The 'partial satisfaction' of many respondents (specifically Ethiopian extension officers) and the common requests for 'vast and wide books' or 'all the information' indicate that many respondents expect, or want, cheap textbooks rather than simple technical guidelines. Textbooks to be used in their work, without any adaptation to local conditions from their part, preferably. It is *recommended* that Agromisa emphasize that Agrodoks are not textbooks covering the subject in depth. Readers must use their knowledge and skills to adapt the guidelines to local circumstances.

4. The fourth conclusion concerns the erroneous *perception* of the Agrodoks' function in the mind of a sizable number of readers: Agrodoks and Agromisa as potential sources of equipment or materials, finance, scholarships, etc.

It is *recommended* that all future Agrodoks make quite clear that Agromisa does and will provide technical advice on request, but nothing else.

5. This leads to a final point, the *role* of the Agrodoks. Cheap as they are, Agrodoks do cost money (or CTA credit points, that could be applied for other purposes), so some useful function must be assumed, in spite of the low response to the questionnaires.

On the other hand: 'In the land of the blind one-eye is king', knowledge is power, even the relatively basic skills explained in the AD s. Publications, including Agrodoks, brighten otherwise austere rural civil service or NGO offices (or private homes, for that matter), imparting an aura of technical skill and know-how. Besides enabling underpaid employees to augment their meagre incomes by dispensing technical advice, after hours and against suitable remuneration in cash or in kind.

Presumably many Agrodoks take precisely the role depicted in the preceding paragraph. Many other AD s probably double as (cheap) textbooks in extension, teaching or training, as explained in the paragraph on 'function'.

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The authors *recommend* that Agromisa/ CTA ponder whether they consider such a *role* acceptable.

### 3.1.1 Additional comments

Implementing the recommendations presented in the text and the conclusions makes sense only if Agromisa/ CTA first decide *if* and *how* they intend to elicit and organize feedback from their target audience.

The authors strongly feel that feedback from AD users is essential to improve the AD series and adapt it to users' demands. In our modern IT age options like Internet and e-mail readily spring to mind, but these might limit response from rural areas, where such modern conveniences are not easily accessible. In the authors' opinion there is no substitute for simple questionnaires in the Agrodoks, provided two conditions are met:

- All replies from the field must be (gratefully) acknowledged, because no AD recipient will be satisfied if a questionnaire, that has cost him or her time and money to complete and send, simply disappears into the blue.
- All replies must not only be filed systematically, but be entered in a database in a standard manner, ready for further analysis if and when the situation demands.

Both conditions will cost Agromisa/ CTA *time* and *money*, and they should consider and decide whether or not they are willing to provide them.

### 3.2 Summary of recommendations on the questionnaire in text and conclusions

Include AD title and edition in the questionnaire to avoid unusable replies because the respondent omitted to enter the data (Ch. 4.2, question 1).

Replace 'region' by 'life zone' or similar, internationally correct terminology, to relate replies to respondents' natural surroundings (Ch. 4.2, question 2).

Replace 'highest level of education reached' by 'highest level of education completed', to avoid ambiguity in the replies (Ch. 4.2, question 4).

In question 6 add a request for information on the organization, because otherwise reply 6.2, 'benefit of my organization', is meaningless. Also revise the wording of questions 6 and 15 to make their connection clear, or omit one of them (Ch. 4.2, questions 6, 15 b).

List simple local substitutes for materials, equipment and feed etc. wherever possible (Ch. 4.2, question 13). In the same question make the connection between question 12 and 13 perfectly clear in the wording of both questions, and subdivide the broad reply option 'other'.

Reword question 14 to emphasize the connection between questions 12 and 14 (Ch. 4.2, question 14).

Reword question 15b, or omit either q. 6 or 15b; see remarks on question 6.

Reword question 17, to emphasize that comments on the specific Agrodok, from which the questionnaire form was detached, should be entered under question 16, preferably, and that question 17 is specifically intended for listing new subjects to be covered in AD format.

Replies on AD format and layout (Ch. 4.2, question 16) give rise to 3 recommendations:

- Study the possibility of publishing the AD s with sturdier binding and/ or polythene cover, to withstand use in the field.
- Study the request for more/ larger illustrations for easier photocopying, or the insertion of detachable flyers or posters in the AD s, or even videocassettes presenting the AD information visually, for application in extension/ training.
- Explain in the preface of all AD s that Agromisa/ CTA are well aware of the advantages of illustrations in colour, but that they would render AD s prohibitively expensive.



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These recommendations might be taken into account *if and when* Agromisa/ CTA decide to continue inserting *revised* questionnaires in the Agrodoks.

Recapitulation of recommendations in the conclusions.

- A thorough archive research of Agrodok shipping records should be undertaken to provide a better estimate of the actual number of AD s with questionnaires distributed.
- Agromisa/ CTA may wish to redefine the target audience of the AD s in the light of the present study's findings, and to consider the impact of a possible redefinition on layout and contents of the Agrodoks.
- Agromisa/ CTA may wish to consider whether or not they accept the probable actual role of the Agrodoks, as described in the final point.

### 3.2.1 General recommendations for a “Publisher’s Note”

In order to prevent Agrodok recipients and commentators from wasting their (and Agromisa's) time it is recommended that a “Publisher’s Note” in all future Agrodoks clearly and specifically sets out the following points:

- Agromisa does and will provide technical advice on request. It is unable to provide any other assistance than technical information. Consequently requests for materials, equipment, finance, workshops, scholarships, etc., etc., are completely useless and a waste of everybody's time.
- Agrodoks are technical pamphlets; they are definitely not textbooks, to be applied in extension work, teaching or training without adaptation to local circumstances by the recipient. Hence requests for ‘large books’ or ‘all the information’ etc., are meaningless.
- Agromisa is well aware of the advantages of coloured illustrations, but their use will make the Agrodoks much more expensive, which is not in the interest of the potential users. Therefore requests for coloured figures cannot be honoured.

### 3.3 Specific conclusions AD 32

The detailed analysis of AD 32 confirms the above named conclusions and recommendations.

An additional specific recommendation is: refer to Agrodok 26 “Marketing for small-scale producers” and Agrodok 42 “Bee products” in order to cover requests made by respondents about marketing, pollination, quality and regulation, bee bread, honey, royal jelly and brood

### 3.4 SPSS Analyses

SPSS is an ideal program to conduct statistical analysis. For Agromisa it is most useful to get conclusions from analyses from one particular Agrodok. Results from the Agrodok collection can give an overview of the performance of the Agrodoks but in order to improve every Agrodok it is necessary to analyze every Agrodok individually.

AD 32 has 111 replies. If Agromisa decides to analyze future questionnaires it is for 95% certain that the same answers will be given with a 10 % margin of error.

To conduct a statistical analysis, a certain number of respondents in the population is necessary to conclude significant valid statements. The tested variables contain insufficient respondents to draw valid statements, even after the creation of profession groups. Most of the analyses are not



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statistical proven. This does not mean the results are useless; they only indicate and portray certain relations without being statistically valid.

With the current number of respondents from each Agrodok it is recommended to stop statistical analyses using SPSS. A frequency analyses with Excel will provide sufficient information for Agromisa to reach the objective of the questionnaire and will give the same insight.

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## 4. EVALUATION RESULTS AND DISCUSSION

### 4.1 Replies versus respondents

The evaluation/ analysis covers 800 questionnaire *replies*, which does not equalize 800 *respondents*, because some respondents returned more than one questionnaire, apparently after having requested and received more than one AD. There are examples from Ghana (a student, a farmer), Kenya (farmer), and Ethiopia (extension officer). On the other hand there are the 2 Ghanaian classmates, whose AD32 questionnaire replies are completely identical. The 800 questionnaires evaluated probably represent around 795 individual respondents. Replies are listed systematically in Annex 3.3.

### 4.2 Results and discussion by question

#### Question 1, Title, Year of last edition of Agrodok.

This question has not always been answered – sometimes the title could be deduced from replies to other questions, but 7 questionnaires were unusable, because there was no way to determine to which AD they refer.

#### Question 2, Gender of respondents.

Male respondents make up 93% of total replies, female respondents just 7% overall, though rising to 18% in the Food Processing AD subject group, in which specifically AD 18, Grains & pulses, is popular with the female gender. (See Annex 4).

#### Question 2, Country and Region.

**Country.** 96% of all replies are from Africa South of the Sahara, with the majority from just 3 countries: Ghana, Nigeria, and Ethiopia. The only other countries worth mentioning are Cameroon and Zambia (each around 6% of total replies), and Kenya, Tanzania and Uganda, with around 4% each. For details see Annex 3.3, a summary is presented in table 4.1 on the next page.

Almost half (47%) of all replies concern Animal Production AD s; almost half of these originate from W. Africa. SWE AD s seem to be more popular in Ethiopia (45% of replies in that category). Response from other parts of the world is minimal.

**Region.** Usual replies are the names of departments or provinces, or parts of the country (E, S, etc.). The question has been read as ‘religion’, sometimes, with replies like Christian or Muslim. Without reference to atlases or maps the question offers little information. It is *recommended* to replace it by a question on ‘life zones’ (tropical lowland rainforest, upland savannah, etc.) using the appropriate international terminology. This would allow relating replies to the respondents’ natural surroundings.

**Table 4.1**

**Overview replies by country**

| AD group             | AP         | %         | PP         | %         | FP         | %         | SWE        | %         | Ec.       | %        | Total      | %          |
|----------------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|-----------|----------|------------|------------|
| No. AD s             | 9          |           | 8          |           | 6          |           | 6          |           | 1         |          | 30         |            |
| Replies              | <b>375</b> | <b>47</b> | <b>141</b> | <b>18</b> | <b>100</b> | <b>12</b> | <b>141</b> | <b>18</b> | <b>43</b> | <b>5</b> | <b>800</b> | <b>100</b> |
| <b>W. Africa</b>     | <b>176</b> |           | <b>59</b>  |           | <b>47</b>  |           | <b>36</b>  |           | <b>13</b> |          | <b>331</b> | <b>41</b>  |
| Ghana                | 76         | 20        | 23         | 16        | 10         | 10        | 15         | 11        | 5         | 12       | 129        | 16         |
| Nigeria              | 97         | 28        | 32         | 32        | 36         | 36        | 20         | 14        | 17        | 17       | 192        | 24         |
| <b>C. Africa</b>     | <b>23</b>  |           | <b>11</b>  |           | <b>4</b>   |           | <b>4</b>   |           | <b>6</b>  |          | <b>48</b>  | <b>6</b>   |
| Cameroon             | 20         | 5         | 11         | 11        | 4          | 4         | 4          | 3         | 6         | 15       | 45         | 6          |
| <b>E. Africa</b>     | <b>116</b> |           | <b>48</b>  |           | <b>40</b>  |           | <b>80</b>  |           | <b>15</b> |          | <b>299</b> | <b>38</b>  |
| Ethiopia             | 68         | 19        | 34         | 24        | 23         | 23        | 64         | 45        | 6         | 15       | 195        | 24         |
| <b>S. Africa</b>     | <b>34</b>  |           | <b>14</b>  |           | <b>1</b>   |           | <b>12</b>  |           | <b>7</b>  |          | <b>68</b>  | <b>8</b>   |
| Zambia               | 23         | 7         | 9          | 9         | 0          |           | 9          | 6         | 7         | 17       | 48         | 6          |
| <b>Africa?</b>       | <b>11</b>  |           | <b>4</b>   |           | <b>3</b>   |           | <b>1</b>   |           | <b>0</b>  |          | <b>19</b>  | <b>2</b>   |
| <b>Other regions</b> | <b>17</b>  |           | <b>4</b>   |           | <b>5</b>   |           | <b>7</b>   |           | <b>2</b>  |          | <b>35</b>  | <b>4</b>   |

Notes

1. AP = Animal Production. PP = Plant Production. FP = Food Processing. SWE = Soil, Water & Environment. E = Economics.
2. Percentages in the Total column refer to the total number of replies (800), as do percentages by AD group in the Replies row. Percentages in the AD group columns refer to total replies within the group.
3. Partially may not add to totals due to rounding.

**Question 3, Profession.**

The average respondent mentions 1.8 professions/ occupations, with little difference between AD subject groups. Professions most frequently mentioned are Extension (23% of total replies), Teacher/ trainer (17%) and (part-time) Farmer (20%).

Extension/ teaching are often combined with part-time farming and/ or project work. Extension/ teaching are the professions most often mentioned in replies from Ethiopia.

Many students (4% of total replies) combine their study with teaching/ training and/ or farming. Fulltime students are mainly from Ghana or Nigeria.

The majority of farmers are part-time farmer; fulltime farmers come from Ghana, Nigeria or E. or S. African countries other than Ethiopia, a country from which there is virtually no farmer response. Farmer response is higher in AP and PP AD s than in other subject groups. Farming is the exclusive occupation of 41 respondents.

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The profession Project Manager/ project staff (13%) is usually combined with other occupations. The same remark applies to the profession Documentalist/ librarian (3%), rarely mentioned as full-time occupation

There are a few full-time Researchers; most respondents combine research work with teaching and/ or project work.

Other professions cover a wide range of occupations; veterinarian (assistant) is frequently mentioned in responses from the Animal Production AD group.

**Question 4, Highest education.**

There are only 794 entries in total. Over half of the respondents (58%) claim a (completed?) University education, including the majority of Nigerian and Ethiopian respondents. Quite a few students (question 3) claim a University education!

Respondents with Primary education + vocational training (3% of total entries), Secondary education (7%) or Secondary education + vocational. training (26%) are mainly from Ghana or one of the E. or S African countries other than Ethiopia.

Of the 41 fulltime farmers over half have either Secondary school + vocational training or University, confirming earlier observations that AD s do not reach the small-scale farmers for whom they were intended – at least: they do not respond.

**Question 5, How did you know about the Agrodok.**

There are 792 replies to the question. The majority, 61%, of the respondents knew about the AD through SPORE, followed by ‘seeing another AD’ (13%), and ‘Other’ (a friend, the library, etc., 8%).

**Question 6, For whose benefit did you obtain the Agrodok.**

This is a multiple response question with an average 1.4 replies per respondent. The options ‘personal benefit’ and ‘benefit of my organization’ both score around 41%, the option ‘other’ (community, family, farmers, etc.) around 16% of total entries.

**Question 7, How did you obtain the Agrodok.**

Of the 788 respondents replying to the question 87% obtained the AD from CTA, 3% from Agromisa against payment and 10% through other channels (friend, bookshop, free from Agromisa, etc.)

**Question 8, What information were you looking for.**

A multiple entry question, with about 2.3 replies per respondent; individual response ranges from 1 to 4 questionnaire options ticked. ‘Information about new practices/ methods’ is the option most frequently ticked (32% of total replies), followed by ‘Information for use in teaching/ training’ (26%). Options ‘Solutions to a problem encountered’ and ‘Information for the preparation of extension material’ are about equally popular (20%, and 19% of total replies). Replies confirm that many AD s serve as (basis for) textbooks or extension material.

**Question 9, Did this Agrodok cover the subject to your expectations.**

Of the 788 replies 55% indicate full satisfaction, 43% partial satisfaction, usually without any reason, and less than 2% partial or total disappointment. Partial dissatisfaction is most frequent among Ethiopian and, to a lesser extent, Nigerian respondents. Reasons usually revolve around the information being inadequate for the particular

objective of the respondent. The reply of a very disappointed Sudanese PhD scholar may serve as illustration: he found the information in the Agrodok totally inadequate for writing his thesis!

Reasons for (partial) dissatisfaction may sometimes be deduced from the respondent's reply to question 16, 'Suggestions for improving this Agrodok'. Especially Ethiopian respondents want the Agrodok to be 'vast and wide' and 'covering all the information', or words to that effect. Possibly they wish their extension material to be presented ready for use, without any effort on their part to adapt it to the local situation.

**Question 10, 11, Did you find the language/ the illustrations clear and easy.**

There are 800, respectively 797 replies, nearly all positive; 'no' replies number <1% in the language question, and 3% in illustrations, with the highest number of 'no' replies in the Animal Production AD s in both cases.

Explanations for a negative reply commonly refer to only one or a few illustrations that are not clear, or erroneous (e.g. Fig. number not agreeing with the text).

**Question 12, Did you do anything concrete with the information in the Agrodok.**

There are 765 replies to this question in the 800 questionnaires analyzed, a 96% response.

**Table 4.2**

**Did you do anything concrete with the information in the Agrodok**

| Option               | Replies    | % of total respondents | % of replies |
|----------------------|------------|------------------------|--------------|
| Yes, successfully    | 361        | 45                     | 47           |
| Encountered problems | 86         | 11                     | 11           |
| Still want to try    | 296        | 37                     | 39           |
| No action            | 22         | 3                      | 3            |
| <b>Total</b>         | <b>765</b> | <b>100</b>             | <b>100</b>   |

Striking is the low % of respondents, 45% of the 800 replies in total, who *claim* to have used the Agrodok information successfully. Positive response, in % of total replies within the AD subject group, is highest for the Economics AD, 52%, and lowest, 44%, in the Food Processing AD s.

Positive replies are (supposed to be) explained in the reply to question 15a, Tangible results. It should be kept in mind that

- (a) a number of replies to question 15a refer to the subject of another AD than the one from which the questionnaire was taken (e.g. successful chicken farming in the questionnaire from the Tomato growing AD), and
- (b) quite a few 'positive' replies to q. 15a are formulated in such a general manner that they may apply to almost any AD.

The second largest group, 37% of the total 800 replies, is the semi-positive, safe reply 'Not yet, but I still want to try'. In relation to subject group totals the percentage is highest, 42%, in the Animal Production AD s and lowest, 31%, in the Food Processing AD s.

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Eleven % of the respondents indicate they encountered problems in applying the Agrodok information. Within AD subject groups, as % of group totals, the percentage varies widely, from 23% in Food Processing to 5% in Economics.

Only 3% of the respondents admit having taken no action; there is little difference between the AD subject groups.

**Question 13, Why did you not do anything with the information.**

This is a question with a multiple reply option, with 235 replies from 208 respondents. Related to the total of the ‘still want to try’ and the ‘no action’ replies to question 12 this represents a response of around 74% (235 replies to q.13, 318 to q.12.3 + 12.4).

In reality there is little relation between the replies to both questions. There are respondents who have indicated that they have used the AD information successfully (reply 12.1), yet explain their reasons for **not** doing so in q.13. There are ‘not done anything’ respondents, who give no reason whatever. And there are respondents who have ticked options 12.2 (problems), 12.3 (not yet) or 12.4 (not done anything) and have selected one or more of the q.13 options.

Within the q.13 reply options the answer ‘other reasons’ is the most frequent one (40%). Reasons are usually of the type ‘AD just received’, ‘waiting for the suitable season/ favourable reply to my project proposal or request for financing’, etc.

With 30% of total replies the answer ‘materials not available’ comes in second place, useful information for AD authors. ‘Practices expensive’ comes in third place with 12% of total replies. Lack of rural credit at reasonable interest rates is cited as a restriction, sometimes. The other options (practices laborious, not suitable or not agreeing with local customs) are of minor importance.

**Question 14, You encountered problems, please explain.**

There are 212 respondents’ replies. Question 14 is supposed to explain the reason(s) why a respondent ticked option 2, ‘I encountered problems in trying to apply the AD information’ in question 12. Again, the connection between q.12.2 and q.14 has not been obvious to the average respondent: there are **86** respondents admitting to having had problems in applying the AD information (see question 12, above) versus **212** respondents explaining their problems!

Respondents’ replies have been categorized into 5 groups in the analysis, see Table 4.3 below.

**Table 4.3**  
**Problems encountered**

| Category                           | Replies    | %          |
|------------------------------------|------------|------------|
| Problems with acceptance           | 22         | 10         |
| Problems with materials or finance | 56         | 26         |
| Technical reasons, disease         | 61         | 29         |
| Other (general, requests, other)   | 25         | 12         |
| No problems/ not yet practiced     | 48         | 23         |
| <b>Total</b>                       | <b>212</b> | <b>100</b> |

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The reply ‘no problem (foreseen)’ is quite frequent. Reasons for not applying the information are regularly given: AD just received, unsuitable season for starting, etc.

**Question 15a, Tangible results from putting the information into practice.**

Question 15a is a single option, open question. The 473 replies have been sorted into six groups, see the following table. Since the answers to question 15a are vital for evaluating the actual impact of the AD s, the percentages shown refer to the total number of replies received (800), or to total replies within the AD subject groups, not to the 473 answers to question 15a.

***Table 4.4***

**Tangible results (all subject groups)**

| Type of reply                       | Replies    | % of respondents |
|-------------------------------------|------------|------------------|
| Referring to other crops/ practices | 27         | 3                |
| AD info not yet applied             | 45         | 6                |
| AD applied in extension/ teaching   | 109        | 14               |
| Technical aspects of application    | 98         | 12               |
| Positive results (?)                | 164        | 20               |
| Other remarks, requests             | 31         | 4                |
| <b>Total</b>                        | <b>473</b> | <b>100</b>       |

Only the 371 replies Extension/ teaching + Technical aspects + Positive results (?) possibly/ hopefully indicate a fruitful application of the Agrodok information, or 46% of the total response – which by itself represents only some 2% of the total number of questionnaires distributed ! (See Ch. 1.3.3). This (possibly) positive result % ranges from 44% in the Animal Production AD subject group to 50% in the Soil, Water & Environment AD s.

Fully 3% of the respondents describe how they have successfully applied the information on some agricultural venture totally different from the Agrodok’s subject. Another 6% uses the 15a question to describe that – and sometimes why – they have not yet started applying the AD prescriptions and techniques.

Applications in extension/ teaching cover a wide range of subjects, from the use of AD data in rural radio programs to the student who writes: I used the AD info successfully: I passed my exams! Not the initial intention of the publishers, perhaps, but still a positive result of their distribution.

The technical aspects cover examples of successful AD application in problems respondents encountered in their agrarian production ventures.

The positive results (?) cover glowing descriptions of successful use of the Agrodok as well as the, unfortunately quite common, ‘one size fits all’ reply: ‘the production method was improved, production cost was reduced and the income was increased’. A standard answer, often from extension officers, applicable to almost any Agrodok.

The category ‘other, requests’ covers miscellaneous remarks, or requests for financial assistance, scholarships, etc.

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**Question 15b, For whose benefit did you use the information in this Agrodok.**

A multiple response question, to which 82 respondents did not reply. There are 1116 answers, 1.6 on average for each of the 718 respondents. Most respondents acquired the AD for the benefit of farmers (mentioned by 38% of the respondents), or for their own benefit (31%). Other options (colleagues, students, other: community, family, etc., are mentioned less frequently. The reply % 'for farmers' is higher than the overall average in the Economics and the Soil, Water & Environment AD s, both typical extension subjects.

Correspondingly the reply 'own benefit' is more prevalent in the typical 'do' AD s: Animal and Plant Production.

The relatively large % of respondents not replying to question 15b might indicate uncertainty on their part about the distinction between q. 6, for whose benefit did you *obtain* the Agrodok, and q. 15b, for whose benefit did you *use* it.

**Question 16, Comments or suggestions for improving this Agrodok.**

Question 16 of the Questionnaire is an open response question. The 546 answers (68% of the 800 replies in total) have been grouped into 3 categories to facilitate analysis, see Table 4.5.

**Table 4.5**

**Suggested improvements**

| <b>Category</b>                             | <b>Replies</b> | <b>%</b>   |
|---|----------------|------------|
| <b>Comments on format/ layout of the AD</b> | <b>80</b>      | <b>15</b>  |
| <b>Comments on AD contents</b>              | <b>204</b>     | <b>37</b>  |
| <b>General comments; other; requests</b>    | <b>261</b>     | <b>48</b>  |
| <b>Total</b>                                | <b>546</b>     | <b>100</b> |

Striking is the high percentage of replies in the reservoir category 'general, other, requests'. Within the reply category 'format/ layout' three comments stand out:

1.a. The request for colour illustrations, mentioned at least once, but often frequently, in the comments on almost any AD. It is *recommended* to add a *note* in all future Agrodoks – or to reprints of present ones – emphasizing that the publisher is well aware of the advantages of colour illustrations, but cost considerations prohibit their use, unfortunately.

b. The request for more illustrations, to photocopy for use in extension programs, for the inclusion of flyers or posters in the AD s for the same purpose, or for videocassettes presenting relevant information in visual form, again for extension or training. It is *recommended* that this request be considered favourably.

2. The request for sturdier binding or polythene covers on the booklets, to better withstand field use. It is *recommended* that this option be studied.

3. The request to make the Agrodoks 'vast and wide', or 'covering all the subjects', i.e. complete textbooks instead of compact, practical technical guides; see discussion on question 9.

The replies in the category 'Comments on AD contents' are mainly requests for clarification of and/ or elaboration of technical issues, according to the AD's subject.

For details see the AD Excel and Word files in the Annexes or the CD-Rom.

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The category 'General, other, requests' covers a wide range of subjects: requests for equipment, finance, scholarships, addresses, more Agrodoks, etc. etc. The, frequently sizeable, category 'General remarks' covers comments like 'excellent book', 'keep it up', 'you are a dear', 'God bless you', and so on. Glad tidings of joy, no doubt, for the authors and publisher, though of little practical value for the improvement of the Agrodok series.

**Question 17, Suggestions for future Agrodoks.**

Again an open response question, with 504 replies in total, a 63 % response in relation to the 800 replies analyzed. Within AD subject groups response is highest, 70 %, in Economics and lowest, 56 %, in the Plant Production AD s.

Individual replies have been grouped into 6 categories for analysis, see Table 4.6

**Table 4.6**

**Suggestions for future Agrodoks**

| <b>Category</b>                  | <b>Replies</b> | <b>%</b>   |
|----------------------------------|----------------|------------|
| <b>Referring to AD discussed</b> | <b>141</b>     | <b>28</b>  |
| <b>Animal production</b>         | <b>93</b>      | <b>18</b>  |
| <b>Animal + Plant production</b> | <b>35</b>      | <b>7</b>   |
| <b>Plant production</b>          | <b>83</b>      | <b>16</b>  |
| <b>Other subjects</b>            | <b>86</b>      | <b>17</b>  |
| <b>General, requests, etc.</b>   | <b>74</b>      | <b>14</b>  |
| <b>Total</b>                     | <b>504</b>     | <b>100</b> |

By far the greatest percentage of replies refers to the subject of the Agrodok from which the questionnaire had been taken. It is *recommended* to reword question 17 to make clear to respondents that comments on the Agrodoks contents should be given in q. 16, preferably.

Animal production AD s are most popular in the response from the Animal Production AD s and lowest in replies from the Soil, Water & Environment AD s.

Popular topics are snail farming, rearing of grass cutters, and types of fowl other than poultry, e.g. Guinea fowl, ostriches.

Animal + Plant production is a mix category of replies covering both plant and animal topics. Some respondents blithely request Agrodoks on about every agricultural subject under the sun. Plant production AD s are most popular in requests from the Plant Production AD s. Mushroom growing is a popular subject. Other requests are for AD s on weed & disease control in crops, organic agriculture, etc.

The category 'other subjects' is most popular in the response from the Economics group; subjects on which AD s are requested are farm accounting, marketing, and similar topics.

The reservoir category 'general, requests, etc.' covers comments like 'no suggestions' and the usual demands for financial or other assistance.

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## ANALYSIS OF AGRODOK 32, Beekeeping in the tropics; A CASE STUDY

### *The analyses*

There are 111 readers who have responded to the questionnaire enclosed in Agrodok 32 "Beekeeping in the tropics". 95% of all respondents are male.

(Note; 111 questionnaires have been included in Vink's evaluation, completed in 2005; 14 additional questionnaires have been received since then)

### **5.1 Home country of the respondents**

With 27% of the respondents Nigeria is the country with the most representatives in this population, followed by Ethiopia with 25% and Ghana in third place, with 21% of the respondents. An analysis of the variable 'country' has been restricted to the 3 countries Nigeria, Ethiopia and Ghana

### **5.2 Profession groups all SPSS analysed Agrodoks**

An analysis of the profession is one of the most essential parts the analysis. Question 3 is a multiple response question; a respondent can give more than one answer. This implies a wide range of replies. Therefore it was decided to categorize the respondents' answers by profession, to give a better overview and allow comparing profession groups. Another reason for categorizing the answers is that no statistical analysis can be performed on the data because there are too many combinations of professions in the respondents' replies. For an accurate statistical analysis there must be a certain number of respondents within a profession group. When the data are categorized into fewer, more general groups these become larger and statistical analyses more accurate.

A multiple response analysis was made to determine how many times a certain profession was named. This does not tell anything about the combination of professions mentioned but it does give insight in the most common professions, which might be used as a guideline for the creation of other groups.

Table 5.1 shows a multi response analysis of the answers given to question 3 by all respondents from all Agrodoks.

***Table 5.1***

**Multi response analysis of the answers given to question 3 by all respondents from all Agrodoks.**

|                         | <b>Count</b> | <b>Pct of responses</b> | <b>Pct of respondents</b> |
|-------------------------|--------------|-------------------------|---------------------------|
| <b>Extension worker</b> | <b>270</b>   | 23%                     | <b>42%</b>                |
| <b>Farmer</b>           | <b>236</b>   | 20%                     | <b>37%</b>                |
| <b>Teacher</b>          | <b>197</b>   | 17%                     | <b>31%</b>                |
| <b>Manager</b>          | <b>159</b>   | 14%                     | <b>25%</b>                |
| <b>Other</b>            | <b>130</b>   | 11%                     | <b>20%</b>                |
| <b>Researcher</b>       | <b>100</b>   | 9%                      | <b>16%</b>                |
| <b>Student</b>          | <b>54</b>    | 5%                      | <b>8%</b>                 |
| <b>Documentalist</b>    | <b>35</b>    | 3%                      | <b>5%</b>                 |
| <b>Total</b>            | <b>1181</b>  | 100%                    | <b>183%</b>               |

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Extension worker is the profession named most frequently (42% of respondents), followed by farmers (37% of respondents). Those two professions have been used as basis for the creation of the profession groups.

After some trials with different types of categories the following profession groups have been distinguished.

Extension workers (101 respondents)  
Extension workers with other professions (167 respondents)  
Farmers (41 respondents)  
Farmers with other professions (128 respondents)  
Other (209 respondents)

All other multiple response questions are not categorized. They are only analyzed by a multi response analysis and compared by country and profession of the respondents.

### **5.3 Profession of the respondents AD 32**

99 respondents have replied to the question about their profession(s) 20 respondents, (20%), are extension workers without other profession, 27 respondents (27%) are extension workers with one or more profession(s) besides extension.

In Ghana most respondents have a profession as an extension worker. 2 respondents, this is 9 % of the Ghanaian respondents are extension workers and have no other profession. 7 respondents (33 % of the Ghanaian respondents) are extension worker with one or more other professions.

In Nigeria ‘farmers with one or more professions besides farming’ is the largest profession group. It comprises 11 respondents, 46 % of all Nigerian respondents.

The second largest profession group is the group ‘extension workers with one or more professions besides extension’. This group contains 5 respondents (21 % of Nigerian respondents) 4 respondents belong to profession group ‘other’ (17 %). 3 respondents, this is 12 % of the Nigerian respondents, have farming as their profession. They have no other professions besides farming. The smallest profession group contains one respondent; it is the group extension workers without other professions.

In Ethiopia the profession group extension workers without other professions is the largest one with 16 respondents (59%). Respondents from the profession group ‘other’ come in second place with 7 respondents or 20%. 4 respondents, 15 % of the Ethiopian respondents, are ‘extension worker with one or more professions’.

Most extension workers live in Ethiopia; half of all respondents who are teacher, farmer and something else live in Nigeria. The group farmers + teachers/ trainers is worth mentioning because 5 of the 6 respondents in this category are from Nigeria. The remaining one is from Ghana.

### **5.4 Highest level of received education of the respondents**

Of all 111 respondents 56 % have university education, 39% from Nigeria and 34% Ethiopia.

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31% of all respondents have received vocational training after secondary school. Around 40% of the Ghanaian respondents have filled in this option.

Of the 30 Nigerian respondents 24 (80%) have a university education, as have 21 (75%) of the Ethiopian respondents. Of the Ghanaian respondents 42% had vocational training after secondary school

In all profession groups most respondents have received university education. In the profession groups with farmers there are relatively more respondents who have received an education at a university than in the profession groups with extension workers

### **5.5 How did the respondents know about the Agrodok**

Most respondents know about the Agrodok through Spore (49%), 18% by seeing another Agrodok and 14% through the organization or school the respondent work.

Most of the Ghanaians (33%) came to know about the Agrodok through their organization or school and 29% through Spore. In Nigeria and Ethiopia most respondents (around 40%) came to know about the Agrodok through Spore followed by seeing another Agrodok (around 23%)

Relatively more Extension workers and Extension workers with other professions know about the Agrodok through Spore compared to Farmers and Farmers with other professions. Farmers and Farmers with other professions know about this Agrodok by seeing another Agrodok.

### **5.6 How did a respondent obtain this Agrodok**

86% obtained the Agrodok through PDS. 10% obtained it in another way and 4% of the respondents paid Agromisa.

### **5.7 Judgment about the content of the Agrodok**

Half of all respondents are fully satisfied about the content of the Agrodok, 47% is partly satisfied and just 3 % judged the content as rather disappointing.

In Ethiopia 79 % of the respondents is partly satisfied, far more than the respondents from Ghana and Nigeria. The majority of those Ethiopian respondents are extension workers, 87 % of the Ethiopian extension workers are partly satisfied.

Some respondents have given an explanation for their partial dissatisfaction.

The information is too general, more detail is wanted.

Traditional techniques should be discussed (for example farmers watching the evolution of the moon in the dry season).

Information is needed about trapping bees so they enter the hive quickly.

The content is inadequate for the usage of modern equipment (hives).

Sting less bee management must be discussed.

There is no information given about medical use of honey and wax.

Information is needed about simple means of honey removal from comb without sophisticated materials/equipment.

There is no information given about medical use of honey and wax.

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More general reasons:

A Ghanaian extension worker who is also a farmer was looking for all Agrodok publications.

A Ghanaian farmer who is also a teacher is not satisfied about the distribution, 'At times books are sent all-day and others do not come at all'.

A Nigerian respondent who belongs to the profession group 'other' wants information about other subjects, it is not clear which.

### **5.8 Used language and illustrations**

1 respondent of the 111 who replied to this question is not satisfied about the language.

5% of the respondents are not satisfied about the illustrations. Usually an unsatisfied respondent wants to see colour illustrations or points out items that are unclear or erroneous in specific illustrations.

### **5.9 Action taken by a respondent**

Just over half of all respondents have successfully taken action; a third has not taken action yet. In Ghana Nigeria and Ethiopia the same tendency is found except that in those countries around 40% has not taken action yet.

This tendency is also found in all profession groups except in Ghana. In Ghana the extension workers with or without another profession, have taken action more successfully than all the other respondents.

'Materials proposed are not available' is the reason most frequently named for not taking action, (49% of total replies), followed by the answer 'other' (26% of total replies)

### **5.10 Tangible results**

The Agrodok has been used successfully in teaching, training and demonstration. The Agrodok has been applied in improving or solving technical aspects of establishing, and operating apiaries at farm and village level. Some of the technical observations of the users might be of use in the booklet's revision.

The information provided by the Agrodok has resulted in an improved production of honey and wax. Higher quantities or quality of honey and wax can be produced at lower cost. Use of locally available materials is essential to keep expenses for hives and equipment to a minimum.

### **5.11 Information searched**

Most respondents were looking for teaching information and new practices.

The assumption that the type of work determines type of information wanted is supported by the following observations:

All extension workers with or without other profession(s) were looking for all types of information.

The other profession groups were mainly searching for teaching information and information on new practices. This tendency can also be found in Ghana, Nigeria and Ethiopia.

Analysis of the judgment about the content and the wanted information in Ghana, Nigeria and Ethiopia shows that respondents who were searching for information to solve a problem or preparation information were partly satisfied more often than other respondents.

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## **5.12 For whom is this Agrodok obtained**

There are two questions in the questionnaire concerning this subject. In this report the replies to question 15b are analyzed. The multiple choice answers to this question are more specific. 72% of all respondents did obtain the Agrodok for benefit of farmers, 47% for their own use, 21% for the benefit of students, 18% obtain the Agrodok for colleagues and finally 16% for other reasons.

Analysis of profession versus wanted information shows that most extension workers obtained the Agrodok for farmers. Farmers obtained the Agrodok for other farmers or for their own use.

## **5.13 Suggestions for future Agrodoks{ TC "10 Suggestions for future Agrodoks" \f C \l "2" }**

Suggestions for future Agrodok concerning the format and lay-out are in general.

Requests for colour pictures

Requests for bigger pictures

Another interesting suggestion, mentioned twice, was to supply the Agrodok with videocassettes or DVD's.

## **5.14 Comments and requests on contents**

Several respondents want to know more about the feeding of bees. They want to know what kind of plants, trees and crops they often visit and prefer to see those plants in illustrations

One respondent wants to know what the best climatologically circumstances are to keep bees.

There are also several respondents who want to know more about diseases and how to control them.

Some respondents want to know how they can use honey to make other products for example wax. Agromisa is already making an Agrodok to cover those requests.

There are also some requests about the marketing of honey and other related products. There is already an Agrodok about the marketing of farm products. Reference should be made to this Agrodok.

## **5.15 { TC "9 For who is this Agrodok obtained" \f C \l "2" }Differences analyses{ TC "11 Differences analyses" \f C \l "2" }**

This part summarizes the SPSS difference analyses for Agrodok 32. Only significant differences are named. In most analyses the variables contained not enough numbers to draw the conclusion that there is a valid significant difference. Nevertheless it was decided to name those significant differences anyway, because they provide a good overview.

All answers to a question are compared by country, profession and education level.

There is a significant difference in the profession of the respondents in Ghana, Nigeria and Ethiopia (question 3)

There is a significant difference in the education of the respondents in Ghana, Nigeria and Ethiopia(question 4)

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There is a significant difference between the profession groups in Ghana, Nigeria and Ethiopia and how a respondent came to know about the Agrodok. Farmers obtained it more often through seeing another Agrodok and less through Spore compared to extension workers(question 5)

There is a significant difference in the judgment about the content from the respondents from Ghana Nigeria and Ethiopia (question 9)

There is a significant difference in the judgment about the content and the profession of all respondents (question 9)

There is a significant difference in the judgment about the contents and the profession of the respondents from Ghana Nigeria and Ethiopia (question 9)

There is a significant difference in the judgment about the contents and the level of education of the respondents from Ghana Nigeria and Ethiopia (question 9)

There is a significant difference in judgment about the content and the action taken. (question 9-12)

There is no significant difference in judgment about the content and taken action in Nigeria, Ghana and Ethiopia. (question 9-12)

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## ANNEXES

### Annex 1 List of Agrodoks, ed. 2006

## Agromisa Publications – Agrodoks

### 1. Animal Production

|   |                         |        |                    |
|---|-------------------------|--------|--------------------|
| <b>Pig keeping in the tropics</b><br>Language:<br>Housing, breeding, reproduction, nutrition, healthcare.                                     | cod AD 1<br>P, F, E     | € 7,55 | ISBN 90-77073-53-1 |
| <b>Small-scale poultry production in the tropics</b><br>Language:<br>Layers, broilers, housing, breeding, nutrition, healthcare.              | cod AD 4<br>S, P, F, E  | € 7,55 | ISBN 90-77073-52-3 |
| <b>Goat keeping in the tropics</b><br>Language:<br>Breeding, nutrition, housing, healthcare, milk and other products.                         | cod AD 7<br>P, F, E     | € 7,55 | ISBN 90-77073-07-8 |
| <b>Dairy cattle husbandry</b><br>Language:<br>Cattle farming systems, breeding, calf rearing, nutrition, health, administration.              | cod AD 14<br>F, E       | € 7,55 | ISBN 90-77073-66-3 |
| <b>Small-scale freshwater fish farming</b><br>Language:<br>Fish farming practices, fish pond construction, carp, tilapia, catfish.            | cod AD 15<br>P, F, E    | € 7,55 | ISBN 90-77073-83-3 |
| <b>Backyard rabbit farming in the tropics</b><br>Language:<br>Housing, breeding, reproduction, nutrition, diseases, administration.           | cod AD 20<br>P, F, E    | € 7,55 | ISBN 90-77073-74-4 |
| <b>On-farm fish culture</b><br>Language:<br>Integrated fish farming natural fish food, fertilizing fish ponds, rice-fish culture.             | cod AD 21<br>P, F, E    | € 7,55 | ISBN 90-77073-44-2 |
| <b>Beekeeping in the tropics</b><br>Language:<br>Bee keeping practices, honey production, bee wax, beehives, feeding, diseases.               | cod AD 32<br>P, F, E    | € 7,55 | ISBN 90-8573-043-0 |
| <b>Duck keeping in the tropics</b><br>Language:<br>Breeding, housing, healthcare, feeding, products, administration.                          | cod AD 33<br>P, F, E    | € 7,55 | ISBN 90-77073-85-X |
| <b>Hatching eggs by hens or in an incubator</b><br>Language:<br>Artificial incubation, construction of incubators, improved natural hatching. | cod AD 34<br>S, P, F, E | € 7,55 | ISBN 90-72746-89-9 |
| <b>Donkeys for traction and tillage</b><br>Language:<br>Donkeys, use, training, equipment.  | cod AD 35<br>P, F, E    | € 7,55 | ISBN 90-77073-17-5 |
| <b>Bee products</b><br>Language:<br>Pollination, marketing, quality and regulation, bee bread, honey, royal jelly, brood.                     | cod AD 42<br>E, F       | € 7,55 | ISBN 90-8573-028-7 |

### 2. Plant Production

|   |                        |        |                    |
|---|------------------------|--------|--------------------|
| <b>Fruit growing in the tropics</b><br>Language:<br>Cultivation, crop care, harvesting.                                 | cod AD 5<br>F, E       | € 7,55 | ISBN 90-72746-42-2 |
| <b>The vegetable garden in the tropics</b><br>Language:<br>Vegetables, small-scale crops, cultivation, garden tools.    | cod AD 9<br>S, P, F, E | € 7,55 | ISBN 90-77073-50-7 |
| <b>Cultivation of soya and other legumes</b><br>Language:<br>Cultivation, nutrition, processing.                        | cod AD 10<br>P, F, E   | € 7,55 | ISBN 90-8573-011-2 |
| <b>Agroforestry</b><br>Language:<br>Agroforestry practices, improved land use, farmers extension.                       | cod AD 16<br>P, F, E   | € 7,55 | ISBN 90-72746-92-9 |
| <b>Cultivation of tomato</b><br>Language:<br>Requirements, pests and diseases, harvest and seed production, marketing.  | cod AD 17<br>P, F, E   | € 7,55 | ISBN 90-85730-39-2 |
| <b>Propagating and planting trees</b><br>Language:<br>Multiplication techniques, on-farm nursery, natural regeneration. | cod AD 19<br>F, E      | € 7,55 | ISBN 90-77073-99-X |
| <b>Protected cultivation</b><br>Language:<br>Construction, requirements and use of greenhouses in various climates.     | cod AD 23<br>F, E      | € 7,55 | ISBN 90-77073-90-6 |



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|  |           |        |                    |
|--|-----------|--------|--------------------|
| <b>Urban Agriculture</b>   | cod AD 24 | € 7,55 | ISBN 90-77073-25-6 |
| Language:  | P, F, E   |        |                    |
| Growing vegetables in cities.  |           |        |                    |
| <b>Granaries</b>   | cod AD 25 | € 7,55 | ISBN 90-72746-95-3 |
| Language:  | P, F, E   |        |                    |
| Storage, food security, income generation.                                       |           |        |                    |
| <b>Identification of crop damage</b>   | cod AD 28 | € 7,55 | ISBN 90-77073-31-0 |
| Language:  | F, E, P   |        |                    |
| Identification of crop damage caused by diseases, pests or mineral deficiencies. |           |        |                    |
| <b>Pesticides: compounds, use and hazards</b>                                    | cod AD 29 | € 7,55 | ISBN 90-77073-41-8 |
| Language:  | F, E      |        |                    |
| Sage use, poisoning, storage, transport, trade names, active ingredients.        |           |        |                    |
| <b>Small-scale seed production</b>   | cod AD 37 | € 7,55 | ISBN 90-77073-43-4 |
| Language:  | E, F      |        |                    |
| Variety improvement of cereals and pulses.                                       |           |        |                    |
| <b>Small-scale mushroom cultivation</b>  | cod AD 40 | € 7,55 | ISBN 90-8573-038-4 |
| Language:  | P, F, E   |        |                    |
| Oyster, shiitake and wood ear mushrooms.   |           |        |                    |

### **3. Food Processing**

|   |            |        |                    |
|---|------------|--------|--------------------|
| <b>Preservation of fruit and vegetables</b>                                 | cod AD 3   | € 7,55 | ISBN 90-77073-30-2 |
| Language:   | P, F, E    |        |                    |
| Preservation techniques, storage life.                                      |            |        |                    |
| <b>Preservation of fish and meat</b>  | cod AD 12  | € 7,55 | ISBN 90-72746-01-9 |
| Language:   | F, E       |        |                    |
| Preservation techniques, storage life.                                      |            |        |                    |
| <b>Protection of stored grains and pulses</b>                               | cod AD 18  | € 7,55 | ISBN 90-77073-49-3 |
| Language:   | P, F, E    |        |                    |
| Storage pests, preventive methods, non-chemical control, use of pesticides. |            |        |                    |
| <b>Small-scale production of weaning foods</b>                              | cod AD 22  | € 7,55 | ISBN 90-72746-76-7 |
| Language:   | F, E       |        |                    |
| Malnutrition, child nutrition, weaning-foods, weaning food production.      |            |        |                    |
| <b>The storage of tropical agricultural products</b>                        | cod AD 31  | € 7,55 | ISBN 90-77073-60-4 |
| Language:   | S, P, F, E |        |                    |
| Storage methods, dry seeds, oily seeds, root crops.                         |            |        |                    |
| <b>Preparation of dairy products</b>  | cod AD 36  | € 7,55 | ISBN 90-77073-80-9 |
| Language:   | P, F, E    |        |                    |
| Dairy products, milkprocessing, dairy equipment, cheese making.             |            |        |                    |

### **4. Soil, Water & Environment**

|   |            |        |                    |
|---|------------|--------|--------------------|
| <b>Soil fertility management</b>  | cod AD 2   | € 7,55 | ISBN 90-8573-031-7 |
| Language:   | S, P, F, E |        |                    |
| Problems, plant nutrients, fertilizers, green manuring, crop husbandry methods.                             |            |        |                    |
| <b>Simple construction surveying for rural applications</b>   | cod AD 6   | € 7,55 | ISBN 90-77073-59-0 |
| Language:   | P, F, E    |        |                    |
| Surveying methods, mapping, levelling.  |            |        |                    |
| <b>The preparation and use of compost</b>   | cod AD 8   | € 7,55 | ISBN 90-8573-006-6 |
| Language:   | S, F, E    |        |                    |
| Composting methods, materials, liquid manure, bokashi.  |            |        |                    |
| <b>Erosion control in the tropics</b>   | cod AD 11  | € 7,55 | ISBN 90-8573-013-9 |
| Language:   | P, F, E    |        |                    |
| Erosion process, technical & agronomic control methods, cropping systems.                                   |            |        |                    |
| <b>Water harvesting and soil moisture retention</b>   | cod AD 13  | € 7,55 | ISBN 90-77073-40-X |
| Language:   | F, E       |        |                    |
| Water harvesting techniques, land rehabilitation, run-off, contour systems.                                 |            |        |                    |
| <b>Establishing &amp; managing waterpoints for livestock</b>  | cod AD 27  | € 7,55 | ISBN 90-77073-64-7 |
| Language:   | P, F, E    |        |                    |
| Livestock water supply, finance, creation, management.  |            |        |                    |
| <b>Rainwater harvesting for domestic use</b>  | cod AD 43  | € 7,55 | ISBN 90-8573-053-8 |
| Language:   | E          |        |                    |
| Basic principles, pre-conditions, designing a system, materials, costs, water quality aspects, maintenance. |            |        |                    |

### **5. Economics**

|  |           |        |                    |
|--|-----------|--------|--------------------|
| <b>Marketing for small-scale producers</b>                                     | cod AD 26 | € 7,55 | ISBN 90-77073-89-2 |
| Language:  | P, F, E   |        |                    |
| Trade, pricing, food security, production management, financing, cooperatives. |           |        |                    |
| <b>Starting a cooperative</b>  | cod AD 38 | € 7,55 | ISBN 90-8573-046-5 |
| Language:  | E         |        |                    |
| Starting a cooperative; advantages, types, organization, statutes.             |           |        |                    |

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## **Annex 2 Questionnaires**

### **Annex 2.1 Questionnaire 1985 – 1995**

In order to be able to improve the next edition of this Agrodok, we would be most grateful if you would take the time to fill in this questionnaire, and send it to: Agromisa, Postbus 41, 6700 AA Wageningen, Netherlands.

Overall opinion:

- 2.a Which (sub)chapters in your opinion contain irrelevant information?
- 2.b Which subjects were insufficiently discussed, or were lacking altogether?
- 3.a Which (sub)chapters are most clear and understandable in their presentation?
- 3.b Which chapters are unclear in their presentation?
- 4.a Which figures are most clear and understandable in their presentation?
- 4.b Which figures are most puzzling or unclear in their presentation?
- 5.a Which (sub)chapters contain the most useful and workable information?
- 5.b Which chapters contain the least useful or workable information?
6. Does this Agrodok contain any information that is contradicted by your personal experience?
7. Remarks:

### **Annex 2.2 Questionnaire 1996, Summary of report**

Note: the following summary is a translation, by the co-author of this evaluation report, of the (Dutch) summary of the study “Over kleine boeken voor kleine boeren” (On small booklets for small farmers) by Annette van der Vliet, August 1997 (c.f. Ch. 1.2.2, Archive research & questionnaire, 1996 of the main report).

The Agromisa Foundation aims to transfer knowledge on small-scale sustainable agriculture in the tropics, for the benefit of less privileged socio-economic groups.

The Agrodok series is intended for small farmers and the intermediaries working for them.

Agromisa cooperates with the CTA (Centre Technique Agricole, Technical Centre for agricultural and rural cooperation) which distributes most Agrodoks.

‘Does Agromisa reach its intended audience?’ is the central question of the present study, whose aim is to clarify the actual composition of the audience, how it uses the Agrodok information and whether or not the ‘product’ is understood by its intended audience.

A combination of archive research and a questionnaire sent to 1000 Agrodok recipients revealed the following.

- One tenth of the Agrodoks is sold by Agromisa to European booksellers, organizations and private individuals.
- The bulk of the Agrodoks is distributed by CTA to indigenous third world citizens, with professions like extension officer, teacher, farmer and project manager/ project staff member.
- Agrodoks do not generally reach small farmers directly, but the intermediaries working for them. Other intermediaries request Agrodoks for personal use.
- Half of the recipients have followed a University education; another one quarter of the respondents did follow vocational training after secondary school.

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Each title in the series has a specific target audience. Agrodoks on small-scale production, e.g. the vegetable garden, are predominantly used in households, whereas titles on preconditions, e.g. erosion control, are used more often in extension and education.

Well over one third of the Agrodoks are used by NGO s, just under one third by households, and a smaller percentage by government agencies. In about half of the cases the Agrodoks are used at local level, in one quarter at regional level.

One third of the Agrodoks distributed is stored in libraries, one third in offices and the remainder in the recipients' homes.

Respondents apply the Agrodoks mainly to improve their own knowledge, but the booklets are regularly used in extension and education as well.

56% of the respondents did develop activities on the basis of the Agrodok information, in nearly all cases leading to positive and satisfying results.

In view of text and layout the Agrodoks' contents fit in best with that part of their audience agreeing most with the authors of the booklets: readers with a higher education working for development projects.

The booklets are appreciated less by private individuals, relatively speaking, although there is a clear interest in the product.

The first recommendation concerns a re-definition of the target audience, because the actual audience corresponds only partially with the intended one.

The second recommendation concerns improvement of the product to render it more readable. At present Agrodoks are written from a theoretical perspective; knowledge is presented in an abstract and impersonal manner.

It is recommended to develop a "writers' protocol" from the perspective of the target audience. It should indicate the design of the product, with quality requirements, to enable writers to know what is expected from them. At present Agrodok authors are contracted for technical knowledge, not because of their writing skills.

For that reason an editorial group should be formed to coach writers in a professional manner, and re-write texts where necessary.

People with (working) experience in the tropics could be involved in Agrodok writing, e.g. foreign students.

(Note: the complete report of Annette van der Vliet, including the 37-point questionnaire, is available – in Dutch – in the Agromisa library)

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**Annex 2.3.1 Questionnaire 1998 – 2001**

**AGRODOK - QUESTIONNAIRE**

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Dear Reader,

*This is a questionnaire addressed to all readers of Agrodok publications. As publishers we would very much appreciate receiving your views and opinions on the contents of this particular Agrodok. We would like to learn from your experience, in order to improve future editions. We would also like a little information on your background, so that we can get to know our readers better and adjust the contents of the Agrodok series to meet your needs. We would therefore kindly ask you to detach this page carefully from the book, fill in the questionnaire, and return it to:*

**Agromisa, P.O. Box 41, 6700 AA Wageningen, The Netherlands**

*Please tick or complete the relevant option(s). Do not hesitate to provide more details on a separate piece of paper if need be.*

**1 Title of this Agrodok:** .....

**Year of last edition (see first page):** .....

**2 Are you:**             Female;             Male

**Country & region:** .....

**3 What is your profession or occupation? (you can tick more than one option)**

- Extension worker
- Teacher or trainer
- Student
- Farmer
- Project manager or managerial staff
- Documentalist / librarian
- Researcher
- Other, please specify: .....

**4 What is the highest level of education you have reached?**

- Vocational training directly after primary school
- Secondary school
- Vocational training directly after secondary school
- University
- Other: .....

**5 How did you come to know about this Agrodok?**

- Through SPORE
- Through Agromisa's Newsletter (or Nieuwsbrief)
- Through an article in another magazine. If so, which? .....
- By word of mouth
- Through the organisation I work for, or school where I study
- Through another Agrodok which I had seen before
- Other. Please specify: .....

**6 For whose benefit did you obtain this Agrodok?**

- For my own personal benefit
- For the benefit of my organisation
- For somebody else's benefit. Please specify: .....

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**7 How did you or your organisation obtain this Agrodok?**

- I requested it from CTA, through the Publications Distribution System.
- I ordered/bought it from Agromisa, and paid for it.
- Other. Please specify: .....

**8 What information were you looking for in this Agrodok?**

*(you can tick more than one option)*

- Information for use in teaching or training
- Information for the preparation of extension material
- Information about new practices or new methods
- Solutions to a problem encountered with current methods or practices
- Other type of information. Please specify : .....
- No specific information, I read the Agrodok out of general interest

**9 Did this Agrodok cover the subject to your expectations?**

- Yes, fully
- Yes, partly
- No, the content was rather disappointing
- No, the content was very disappointing;  
*If "no", please explain briefly on which aspects you need more information or which aspects were treated unsatisfactorily:*

-----  
-----  
-----

**10 Did you find the language used clear and easy to understand?**

- Yes
- No  
*If "no", please explain briefly:*

-----  
-----

**11 Did you find the illustrations clear and easy to understand?**

- Yes
- No  
*If "no", please specify which illustrations are not clear, and why:*

-----  
-----  
-----

**12 Did you do anything concrete with the information in this Agrodok?**

- Yes, successfully (continue at 15)
- Yes, but I encountered problems (continue at 14)
- Not yet, but I still want to try
- No, (continue at 13)

**13 You did not do anything concrete with the information. Why?**

- The practices proposed are too expensive.

- The practices or solutions proposed are too laborious.
- The materials proposed are not available.
- The practices proposed are not suitable for the local soil and climatic conditions.
- The practices proposed do not fit in with local customs.
- Other: .....

**Now continue at question 16**

**14 You had problems in applying methods or techniques described in this Agrodok. Please explain which and why, briefly:**

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 -----  
 -----

Now continue at question 16

**15 You applied the information successfully.**

**a) What were the tangible results from putting the information into practice?**

*In your answer please explain what results you achieved with respect to improvements in technique, to the quality of your produce, to savings in time or materials, cost reductions, income generation, etc.*

-----  
 -----  
 -----  
 -----

**b) For whose direct benefit did you use the information in this Agrodok:**

- For my own benefit
- For my colleagues
- For my students
- For farmers
- Others, please specify:

**16 If you have any comments or suggestions for improving this Agrodok, please state them below:**

-----  
 -----  
 -----  
 -----

**17 If you have suggestions for topics which could be covered in future Agrodok publications, please give them below:**

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**Thank you for taking the time to fill in this questionnaire!**

### Annex 2.3.2 Overview of questionnaires received and Excel & Word files made

| AD | Subject | Excel file | Word file | Replies included | later | Total |
|----|---------|------------|-----------|------------------|-------|-------|
| 1  | AP      | yes        | Yes       | 19               | 6     | 25    |
| 2  | SWE     | yes        | Yes       | 15               |       | 15    |
| 3  | FP      | yes        | Yes       | 2                |       | 2     |
| 4  | AP      | yes        | Yes       | 54               | 10    | 64    |
| 5  | PP      | yes        | Yes       | 23               | 6     | 29    |
| 6  | SWE     | yes        | Yes       | 34               | 3     | 37    |
| 7  | AP      | yes        | Yes       | 32               | 3     | 35    |
| 8  | SWE     | yes        | Yes       | 26               | 2     | 28    |
| 9  | PP      | yes        | Yes       | 37               |       | 37    |
| 10 | PP      |            |           | 1                |       | 1     |
| 11 | SWE     | yes        | Yes       | 35               |       | 35    |
| 12 | FP      | yes        | Yes       | 25               | 1     | 26    |
| 13 | SWE     | yes        | Yes       | 20               | 5     | 25    |
| 14 | AP      | yes        | Yes       | 22               | 14    | 36    |
| 15 | AP      | yes        | Yes       | 35               | 2     | 37    |
| 16 | PP      |            |           | 2                |       | 2     |
| 17 | PP      | yes        | Yes       | 62               | 8     | 70    |
| 18 | FP      | yes        | Yes       | 12               | 2     | 14    |
| 19 | PP      |            |           | 1                |       | 1     |
| 20 | AP      | yes        | Yes       | 25               | 1     | 26    |
| 22 | FP      | yes        | Yes       | 20               | 1     | 21    |
| 24 | PP      |            |           |                  | 1     | 1     |
| 25 | PP      | yes        | Yes       | 13               | 1     | 14    |
| 26 | E       | yes        | Yes       | 43               | 2     | 45    |
| 27 | SWE     | yes        | Yes       | 11               | 2     | 13    |
| 29 | PP      |            |           | 2                |       | 2     |
| 31 | FP      | yes        | Yes       | 22               | 1     | 23    |
| 32 | AP      | yes        | Yes       | 111              | 14    | 125   |
| 33 | AP      | yes        | Yes       | 56               |       | 56    |
| 34 | AP      | yes        | Yes       | 21               | 1     | 22    |
| 36 | FP      | yes        | Yes       | 19               |       | 19    |
|    |         |            | Total     | 800              | 86    | 886   |

#### Notes

1. AD s 21, 23, 28, 30 35 and beyond no. 36 are either published without a questionnaire (no. 21), published recently (i.e. without questionnaires, no.'s 23, 25, 35), or yet to be published (no. 30).

2. AP, PP, etc. refer to the subject group of the AD:

AP = Animal Production, PP = Plant Production, FP = Food Processing, SWE = Soil, Water & Environment, E = Economics.

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3. Evaluation of the questionnaires did not proceed in numerical sequence, but according to the requirements of the editors working on AD revisions. Evaluation of the replies on some AD s (Excel files, Word files, see Ch. 2.2.2 and 2.2.3) was completed in late 2004, most in the course of 2005, and a few in 2006. For that reason a number of questionnaires – especially from popular AD s like no. 4, 14, 32 – are not included in the report, because they arrived after the evaluation of that particular AD had been completed.





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### **Annex 3.2 Word**

#### **Explanation/ discussion Questionnaire Agrodok 2E “Soil fertility management”**

Note: see also Schematic Overview Responses in Excel file “Questionnaire Agrodok 2E”.

**Response:** 15 questionnaires returned, 14 dating from 2002 to 2004, and 1 of unknown date. All replies refer to Agrodok 2E, edition 1998.

There are 14 male respondents and 1 female (from Ghana).

**Origin (q. 2):** All replies from Africa:

|              |          |   |
|--------------|----------|---|
| West Africa: | Ghana    | 5 |
|              | Nigeria  | 1 |
| East Africa: | Ethiopia | 4 |
|              | Tanzania | 1 |
| South Africa | Zambia   | 3 |
|              | Zimbabwe | 1 |

**Profession/ occupation (q. 3):** Highly varied, 25 occupations mentioned, usually in combination:

|                      |   |
|----------------------|---|
| Extension worker     | 4 (exclusively: no. 7, Ethiopia).   |
| Teacher/ trainer     | 3 (exclusively: no. 8, Ethiopia).   |
| Student              | 3 (exclusively: no.’s 1, 4, Ghana; no. 4 also ordered Adoks 4, 32).   |
| Farmer               | 6 (just farmer: no. 3, Ghana, no. 14, Zambia).  |
| Project man./ staff  | 5   |
| Documentalist/ libr. | 0   |
| Researcher           | 1 (exclusively, no. 15, Zimbabwe).  |
| Other professions    | 3 (combination with other professions: no. 9, Ethiopia: teacher forest management; no. 12, Zambia: Policy analyst; no. 14, Zambia: missionary). |

**Highest level of education (q. 4):** 15 replies:

|                                  |  |
|----------------------------------|--|
| Voc. training after prim. school | 1 (Ghana).                                     |
| Secondary school                 | 3 (2 Ghana, 1 Zambia).                         |
| Voc. training after sec. School  | 2 (1 Ghana, 1 Zambia).                         |
| University                       | 8 (including no. 1, the student from Ghana !). |
| Other                            | 1 (no. 7, Ethiopia: College).                  |

**How did you come to know about this Agrodok? (q. 5):**

|                                   |   |
|-----------------------------------|---|
| Through SPORE                     | 3   |
| Through Agromisa Newsletter       | 1   |
| Through article in a magazine     | 1 (LEISA, no. 13, Zambia).                                |
| By word of mouth                  | 2   |
| Through my organisation or school | 1   |
| Through seeing another Agrodok    | 5   |
| Other                             | 2 (friend, no. 7, Eth.; VSO catalogue, no. 11, Tanzania). |

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**For whose benefit did you obtain this Agrodok? (q. 6):** 18 replies:

|                         |   |
|-------------------------|---|
| Personal benefit        | 9 (5 respondents have ticked only this option).   |
| Benefit of organization | 6 (4 times ticked as only option; organization not specified).  |
| Other                   | 3 (twice ticked as only option: Univ. library, no. 1; a friend, no.2, both Ghana. Community, no. 14, Zambia). |

**How did you obtain this Agrodok? (q. 7):**

|               |   |
|---------------|---|
| From CTA      | 6   |
| From Agromisa | 1   |
| Other         | 8 (CTA/ Agromisa, no.'s 2, 6, 7, 13, 15; friend, no.8, Univ. library, no. 1; no explanation no. 9). |

**What info were you looking for? (q. 8):** 34 replies in total, most a combination of from 2 to 4 options:

|                               |   |
|-------------------------------|---|
| Info for teaching/ training   | 11  |
| Info for extension material   | 4   |
| Info new practices or methods | 11 (sole option respondent 3, Ghana).                       |
| Solutions to a problem        | 7   |
| Other information             | 1 ('for project literature review', no. 1, student, Ghana). |
| General interest              | 0   |

**Subject covered to your expectations? (q. 9):**

|                      |  |
|----------------------|--|
| Yes, fully           | 7  |
| Yes, partly          | 8 (respondents 3, Ghana, 6, Nigeria, 7, 9, 10, Ethiopia, 11, Tanzania give no explanation. No. 1, the Ghanaian student, explains: 'I got all information, except on sawdust'. No. 8, Ethiopia: 'because it has good start, but the book is very small for my teaching purpose'). |
| Content disapp.      | 0  |
| Content very disapp. | 0  |

**Language and illustrations clear and easy to understand? (q. 10, 11):** All respondents have responded 'yes' to both questions, though no. 3, the Ghanaian farmer comments on question 11: 'but some illustrations is difficult to understand small for we lower education'.

**Did you apply the info in the Agrodok? (q. 12):** 15 replies:

|                           |   |
|---------------------------|---|
| Info successfully applied | 6   |
| Encountered problems      | 2 (no. 3, Ghana, no. 8, Ethiopia; explanation see q. 14). |
| Still want to try         | 7   |
| No action                 | 0   |

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**Why did you do nothing with the info? (q. 13):** 4 replies from 4 respondents:

|                         |   |
|-------------------------|---|
| Practices too expensive | 0   |
| Practices too laborious | 1   |
| Materials not available | 1   |
| Practices not suitable  | 0   |
| Practices do not fit    | 0   |
| Other reasons           | 2 ('not yet season for farming', no. 2, Ghana; will start later, no. 14, Zambia). |

**Problems (q. 14):** 3 replies, of which no. 10, Ethiopia, simply states: 'There is no problem in application'. Two answers explain the respondents' reason for ticking answer 12.2:

- 'This booklet is giving some more briefly. When you take one serious you were suseasfully'. (no. 3, the Ghanaian farmer of 'lower education', who probably means that the text is still too sophisticated for uneducated farmers).
- 'Mulching by using plastic cover is too expensive when we see at farmer level'. (no. 8, Ethiopia).

**Tangible results (q. 15a):** 8 replies:

Replies (possibly) referring to **other crops and practices**: none.

Replies indicating that the **information has not (yet) been applied** (2 respondents):  
'The technique is had but I for try one by one and materials cost'. (no. 3, farmer, Ghana).  
'I now try to do concrete practice onward'. (no. 10, extension officer, Ethiopia).

Replies indicating that the Agrodok has been used successfully in **extension/ teaching** or similar fields (2 respondents):

'To satisfy my course requirements'. (no. 1, student, Ghana, who apparently has copied the Agrodok to write a term paper!).

'The information was used during a farmer workshop on soil conservation'. (no. 12, project staff/ policy analyst, Zambia).

Replies mostly highlighting **(a) technical aspect(s)** of implementation and/ or results, or giving technical comments (1 respondent, but see also next paragraph):

'I used animal manure to cashew nut trees. The results is good, faster growth rate, saving in money and time. I expect good output. Also good utilization of water, no excess evaporation'. (no.11, farmer/ economic & planning director, Tanzania).

**Positive results** (or 'correct' replies?, the difference is not always clear; 3 respondents):

'The use of compost manure for soil improvement rather than fertilizer which is cost effective. The use of compost improves yield and environmental sanitation'. (no. 6, extension worker/ project staffer, Nigeria).

'By applying compost, by planting Vetiver rows, by planting elephant grass, by mulching coffee new plants & mother trees to control erosion, moisture loss & to add nutrients to the soil'. (no. 7, extension worker, Ethiopia).

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. 'Mulching blocks fast movement of water, hence preventing washing away of manure. Mulching did help the retention of moisture for crop survival. Good and steady penetration of fertilizer'. (no. 13, extension worker/ farmer/ project staffer, Zambia).

**Other** remarks: none.

Conclusion: (presumably) some tangible positive results, in teaching and actual application.

**For whose benefit did you use the info? (q. 15b):** 5 respondents did not reply (no.'s 2, 4, 5, Ghana, 9, Ethiopia, 14, Zambia). The remaining 10 respondents have ticked 12 options in total, sometimes in combination:

|                    |  |
|--------------------|--|
| For my own benefit | 4 (sole entry of respondents 1, 3, Ghana).   |
| For my colleagues  | 0  |
| For my students    | 1 (sole entry of no. 8, Ethiopia).   |
| For farmers        | 7 (sole reply of respondents 6, Nigeria, 7, 10, Eth., Ghana, 12, Zambia and 15, Zimbabwe). |
| Other              | 0  |
| (no reply          | 5)   |

**Comments and suggestions for improving this Agrodok (q. 16):** 7 replies, whereof 1 of the type 'Continue' (respondent 7, Ethiopia).

Comments on format and layout (2):

. 'Corrections (1) Page 48 last 2 lines are repeated on page 49. (2) Page 50 paragraph 3 refers to Table 2 instead of table 1'. (no. 2, Ghana).

. 'It is good but the volume is small. If it is possible make it vast and wide'. (no. 10, Ethiopia).

Comments and requests on contents (2):

. 'If the book includes more than the information what it has and if it has more practice be included'. (no. 8, teacher, Ethiopia, who apparently would prefer to receive a completely elaborated teaching syllabus).

. 'If the Agrodok includes the importance of forest (natural forest) in improving fertility of soil it is more better'. (no. 9, teacher forest management, Ethiopia).

Requests for information/ assistance, other (2):

. 'How to make youths get access to Agrodok publications so as to be encouraged into agricultural enterprise'. (no. 6, Nigeria).

. 'Is it true that the sulphur dust we are spraying to our cashew trees as fungicide adds fertility to the soil structure. If no, what is the alternative?'. (no. 11, Tanzania).

---

**Suggestions for future Agrodoks (q. 17):** 9 replies in total, of which 1 refers to Agrodok 2, and 8 give suggestions for other Agrodok topics.

Remarks referring to Agrodok 2(1):

. 'Topics or detail soil fertility mgt'. (? , no. 8, Ethiopia).

General remarks: none.

Suggestions for future Agrodoks (8):

Animal production:

. Snail raising. (no. 's 2, Ghana, 6, Nigeria).

. 'Animal husbandry on how to keep different kinds of animal successfully'. (no. 6, Nigeria).

Plant production:

. Arable crops; roots and tubers (no. 1, Ghana).

. Important weeds in the tropics. (no. 7, Ethiopia).

. Nursery, forest management, ecology (no. 9, Ethiopia).

Other subjects:

. How to preserve fruits by canning, including tomatoes and peppers. (no. 11, Tanzania).

Requests (1, respondent no. 8, Ethiopia, see above):

. 'Please I need more information about the forest department in your university'.

The questionnaires do not give any information on action(s), if any, undertaken by Agromisa in response to the remarks and suggestions.

### Annex 3.3 Summary all questionnaires

| SUMMARY ALL QUESTIONNAIRES       |                      |                     |                    |                             |           |            |
|----------------------------------|----------------------|---------------------|--------------------|-----------------------------|-----------|------------|
|                                  | Animal<br>Production | Plant<br>Production | Food<br>Processing | Soil, Water,<br>Environment | Economics | TOTAL      |
| NUMBER of Agrodoks               | 9                    | 8                   | 6                  | 6                           | 1         | 30         |
| <b>TOTAL Number of Responses</b> | <b>375</b>           | <b>141</b>          | <b>100</b>         | <b>141</b>                  | <b>43</b> | <b>800</b> |
| <b>QUESTION</b>                  |                      |                     |                    |                             |           |            |
| <b>2 Gender respondents</b>      |                      |                     |                    |                             |           |            |
| Male                             | 350                  | 131                 | 82                 | 139                         | 41        | 743        |
| Female                           | 25                   | 10                  | 18                 | 2                           | 2         | 57         |
| <b>2 Country</b>                 |                      |                     |                    |                             |           |            |
| <b>West Africa</b>               | <b>176</b>           | <b>59</b>           | <b>47</b>          | <b>36</b>                   | <b>13</b> | <b>331</b> |
| Côte d' Ivoire                   | 1                    | 1                   | 0                  | 0                           |           | 2          |
| Gambia                           | 1                    | 2                   | 0                  | 0                           |           | 3          |
| Ghana                            | 76                   | 23                  | 10                 | 15                          | 5         | 129        |
| Guinea Bissau                    | 0                    | 0                   | 1                  | 0                           |           | 1          |
| Mali                             | 0                    | 0                   | 0                  | 1                           |           | 1          |
| Nigeria                          | 97                   | 32                  | 36                 | 20                          | 7         | 192        |
| Senegal                          | 0                    | 1                   | 0                  | 0                           |           | 1          |
| Togo                             | 2                    | 0                   | 0                  | 0                           | 1         | 3          |
| <b>Central Africa</b>            | <b>23</b>            | <b>11</b>           | <b>4</b>           | <b>4</b>                    | <b>6</b>  | <b>48</b>  |
| Cameroon                         | 20                   | 11                  | 4                  | 4                           | 6         | 45         |
| Congo                            | 2                    | 0                   | 0                  | 0                           |           | 2          |
| Congo Braz.                      | 1                    | 0                   | 0                  | 0                           |           | 1          |
| <b>East Africa</b>               | <b>116</b>           | <b>48</b>           | <b>40</b>          | <b>80</b>                   | <b>15</b> | <b>299</b> |
| Eritrea                          | 5                    | 2                   | 1                  | 2                           |           | 10         |
| Ethiopia                         | 68                   | 34                  | 23                 | 64                          | 6         | 195        |
| Kenya                            | 13                   | 9                   | 3                  | 3                           | 3         | 31         |
| Sudan                            | 3                    | 0                   | 0                  | 0                           |           | 3          |
| Tanzania                         | 13                   | 0                   | 7                  | 6                           | 3         | 29         |
| Uganda                           | 14                   | 3                   | 6                  | 5                           | 3         | 31         |
| <b>South Africa</b>              | <b>34</b>            | <b>14</b>           | <b>1</b>           | <b>12</b>                   | <b>7</b>  | <b>68</b>  |
| Angola                           | 1                    | 0                   | 0                  | 0                           |           | 1          |
| Botswana                         | 1                    | 0                   | 0                  | 0                           |           | 1          |
| Malawi                           | 4                    | 1                   | 0                  | 1                           |           | 6          |
| Mozambique                       | 0                    | 1                   | 0                  | 0                           |           | 1          |
| South Africa                     | 2                    | 0                   | 0                  | 0                           |           | 2          |
| Zambia                           | 23                   | 9                   | 0                  | 9                           | 7         | 48         |
| Zimbabwe                         | 3                    | 3                   | 1                  | 2                           |           | 9          |
| Africa ?                         | 11                   | 4                   | 3                  | 1                           |           | 19         |
| <b>Other regions</b>             | <b>17</b>            | <b>4</b>            | <b>5</b>           | <b>7</b>                    | <b>2</b>  | <b>35</b>  |
| <i>Caribbean, Latin America</i>  |                      |                     |                    |                             |           |            |
| Belize                           | 0                    | 0                   | 1                  | 2                           |           | 3          |
| El Salvador                      | 1                    | 0                   | 0                  | 0                           |           | 1          |
| Guyana                           | 3                    | 0                   | 2                  | 0                           | 1         | 6          |
| Jamaica                          | 1                    | 0                   | 0                  | 0                           |           | 1          |
| Nicaragua                        | 1                    | 0                   | 0                  | 0                           |           | 1          |
| St. Lucia                        | 0                    | 1                   | 0                  | 0                           |           | 1          |
| Suriname                         | 1                    | 2                   | 0                  | 0                           |           | 3          |
| <i>Europa</i>                    |                      |                     |                    |                             |           |            |
| Italy                            | 0                    | 0                   | 1                  | 0                           | 1         | 2          |
| Spain                            | 0                    | 0                   | 0                  | 1                           |           | 1          |
| <i>Asia, Pacific</i>             |                      |                     |                    |                             |           |            |
| Bangladesh                       | 1                    | 0                   | 0                  | 0                           |           | 1          |
| India                            | 1                    | 0                   | 0                  | 1                           |           | 2          |

| <b>SUMMARY ALL QUESTIONNAIRES</b>   |                          |                         |                        |                                 |                  |              |
|-------------------------------------|--------------------------|-------------------------|------------------------|---------------------------------|------------------|--------------|
|                                     | <b>Animal Production</b> | <b>Plant Production</b> | <b>Food Processing</b> | <b>Soil, Water, Environment</b> | <b>Economics</b> | <b>TOTAL</b> |
| <b>NUMBER of Agrodoks</b>           | 9                        | 8                       | 6                      | 6                               | 1                | 30           |
| <b>TOTAL Number of Responses</b>    | <b>375</b>               | <b>141</b>              | <b>100</b>             | <b>141</b>                      | <b>43</b>        | <b>800</b>   |
| <b>QUESTION</b>                     |                          |                         |                        |                                 |                  |              |
| <b>3 Profession</b>                 | <b>672</b>               | <b>243</b>              | <b>189</b>             | <b>244</b>                      | <b>93</b>        | <b>1441</b>  |
| Extension                           | 157                      | 51                      | 32                     | 69                              | 20               | 329          |
| Teaching                            | 123                      | 38                      | 41                     | 29                              | 16               | 247          |
| Student                             | 37                       | 8                       | 2                      | 13                              | 3                | 63           |
| Farmer                              | 153                      | 62                      | 30                     | 30                              | 17               | 292          |
| Project staff                       | 86                       | 31                      | 26                     | 34                              | 17               | 194          |
| Documentalist                       | 15                       | 8                       | 8                      | 5                               | 4                | 40           |
| Researcher                          | 49                       | 29                      | 22                     | 26                              | 8                | 134          |
| Other                               | 70                       | 16                      | 29                     | 40                              | 8                | 163          |
| <b>4 Highest Education</b>          | <b>372</b>               | <b>138</b>              | <b>100</b>             | <b>141</b>                      | <b>43</b>        | <b>794</b>   |
| Prim. Sch. + voc. training          | 11                       | 9                       | 2                      | 1                               | 1                | 24           |
| Sec. Sch.                           | 25                       | 15                      | 3                      | 9                               | 2                | 54           |
| Sec. Sch. + voc. training           | 107                      | 38                      | 22                     | 31                              | 6                | 204          |
| University                          | 208                      | 71                      | 68                     | 87                              | 30               | 464          |
| Other                               | 27                       | 5                       | 5                      | 13                              | 4                | 54           |
| <b>5 How know about Agrodok</b>     | <b>371</b>               | <b>137</b>              | <b>100</b>             | <b>141</b>                      | <b>43</b>        | <b>792</b>   |
| Spore                               | 199                      | 87                      | 65                     | 98                              | 35               | 484          |
| Agromisa Newsletter                 | 22                       | 10                      | 9                      | 6                               | 1                | 48           |
| Article in mag.                     | 7                        | 1                       | 3                      | 4                               |                  | 15           |
| Word of mouth                       | 15                       | 9                       | 1                      | 4                               |                  | 29           |
| Organ./ school                      | 31                       | 5                       | 5                      | 7                               | 1                | 49           |
| Seeing Agrodok                      | 61                       | 17                      | 10                     | 13                              | 5                | 106          |
| Other                               | 36                       | 8                       | 7                      | 9                               | 1                | 61           |
| <b>6 For whose benefit obtained</b> | <b>518</b>               | <b>201</b>              | <b>135</b>             | <b>196</b>                      | <b>61</b>        | <b>1111</b>  |
| Personal benefit                    | 220                      | 85                      | 49                     | 82                              | 20               | 456          |
| Benefit of organisation             | 206                      | 85                      | 64                     | 84                              | 33               | 472          |
| Other                               | 92                       | 31                      | 22                     | 26                              | 8                | 179          |
| <b>7 How Agrodok obtained</b>       |                          |                         |                        |                                 |                  |              |
| From CTA                            | 311                      | 124                     | 91                     | 120                             | 41               | 687          |
| From Agromisa                       | 14                       | 4                       | 2                      | 3                               |                  | 23           |
| Other                               | 42                       | 9                       | 7                      | 18                              | 2                | 78           |
| <b>8 What info needed</b>           | <b>845</b>               | <b>298</b>              | <b>238</b>             | <b>354</b>                      | <b>100</b>       | <b>1835</b>  |
| Teaching/ training                  | 227                      | 78                      | 67                     | 78                              | 26               | 476          |
| Extension material                  | 171                      | 55                      | 41                     | 65                              | 22               | 354          |
| New practices/ methods              | 278                      | 101                     | 73                     | 108                             | 27               | 587          |
| Problem solutions                   | 145                      | 53                      | 52                     | 92                              | 22               | 364          |
| Other info                          | 19                       | 6                       | 13                     | 9                               | 2                | 49           |
| General interest                    | 5                        | 4                       | 2                      | 2                               | 1                | 14           |
| <b>9 Coverage subjects</b>          |                          |                         |                        |                                 |                  |              |
| Fully                               | 210                      | 81                      | 54                     | 65                              | 26               | 436          |
| Partly                              | 151                      | 52                      | 44                     | 73                              | 17               | 337          |
| Disappointing                       | 7                        | 4                       | 1                      | 1                               |                  | 13           |
| Very disappointing                  | 0                        | 0                       | 0                      | 2                               |                  | 2            |
| <b>10 Language clear/ easy</b>      |                          |                         |                        |                                 |                  |              |
| Yes                                 | 371                      | 140                     | 99                     | 140                             | 43               | 793          |
| No                                  | 4                        | 1                       | 1                      | 1                               |                  | 7            |
| <b>11 Illustrations clear/ easy</b> |                          |                         |                        |                                 |                  |              |
| Yes                                 | 359                      | 138                     | 95                     | 138                             | 43               | 773          |
| No                                  | 14                       | 3                       | 4                      | 3                               |                  | 24           |



| <b>SUMMARY ALL QUESTIONNAIRES</b>     |                              |                             |                            |                                     |                  |              |
|---------------------------------------|------------------------------|-----------------------------|----------------------------|-------------------------------------|------------------|--------------|
|                                       | <b>Animal<br/>Production</b> | <b>Plant<br/>Production</b> | <b>Food<br/>Processing</b> | <b>Soil, Water,<br/>Environment</b> | <b>Economics</b> | <b>TOTAL</b> |
| <b>NUMBER of Agrodoks</b>             | <b>9</b>                     | <b>8</b>                    | <b>6</b>                   | <b>6</b>                            | <b>1</b>         | <b>30</b>    |
| <b>TOTAL Number of Responses</b>      | <b>375</b>                   | <b>141</b>                  | <b>100</b>                 | <b>141</b>                          | <b>43</b>        | <b>800</b>   |
| <b>QUESTION</b>                       |                              |                             |                            |                                     |                  |              |
| <b>12 Agrodok info applied?</b>       | <b>365</b>                   | <b>132</b>                  | <b>87</b>                  | <b>139</b>                          | <b>42</b>        | <b>765</b>   |
| Yes, successfully                     | 170                          | 62                          | 38                         | 69                                  | 22               | 361          |
| Problems encountered                  | 30                           | 17                          | 20                         | 17                                  | 2                | 86           |
| Still want to try                     | 153                          | 50                          | 27                         | 49                                  | 17               | 296          |
| No action                             | 12                           | 3                           | 2                          | 4                                   | 1                | 22           |
| <b>13 Why nothing done</b>            | <b>110</b>                   | <b>47</b>                   | <b>32</b>                  | <b>40</b>                           | <b>6</b>         | <b>235</b>   |
| Practices expensive                   | 15                           | 5                           | 4                          | 4                                   | 1                | 29           |
| Practices laborious                   | 7                            | 2                           | 1                          | 5                                   | 1                | 16           |
| Materials not avail.                  | 39                           | 12                          | 7                          | 12                                  |                  | 70           |
| Practices not suitable                | 4                            | 2                           | 0                          | 1                                   |                  | 7            |
| Practices do not fit                  | 7                            | 4                           | 3                          | 1                                   |                  | 15           |
| Other reasons                         | 34                           | 23                          | 17                         | 17                                  | 4                | 95           |
| <b>14 Problems</b>                    | <b>93</b>                    | <b>41</b>                   | <b>35</b>                  | <b>38</b>                           | <b>6</b>         | <b>213</b>   |
| Acceptance                            | 10                           | 3                           | 4                          | 6                                   |                  | 23           |
| Materials and/ or finance             | 24                           | 7                           | 12                         | 11                                  |                  | 54           |
| Technical reasons, disease            | 31                           | 12                          | 10                         | 8                                   | 3                | 64           |
| Other (general, requests, other)      | 7                            | 10                          | 4                          | 2                                   | 1                | 24           |
| No problems/ not yet practised        | 21                           | 9                           | 5                          | 11                                  | 2                | 48           |
| <b>15a Tangible results</b>           | <b>214</b>                   | <b>85</b>                   | <b>62</b>                  | <b>89</b>                           | <b>23</b>        | <b>473</b>   |
| Other crops/ Practices                | 14                           | 5                           | 3                          | 4                                   | 1                | 27           |
| Not yet applied                       | 25                           | 2                           | 7                          | 11                                  |                  | 45           |
| Applied in extension/ teaching        | 49                           | 13                          | 17                         | 19                                  | 11               | 109          |
| Technical aspects                     | 48                           | 13                          | 12                         | 20                                  | 5                | 98           |
| Positive results (?)                  | 67                           | 41                          | 19                         | 32                                  | 5                | 164          |
| Other remarks, requests               | 11                           | 11                          | 4                          | 3                                   | 1                | 30           |
| <b>15b For whose benefit used</b>     | <b>519</b>                   | <b>227</b>                  | <b>126</b>                 | <b>179</b>                          | <b>65</b>        | <b>1116</b>  |
| Own benefit                           | 171                          | 73                          | 37                         | 49                                  | 16               | 346          |
| Colleagues                            | 60                           | 39                          | 17                         | 19                                  | 12               | 147          |
| Students                              | 54                           | 27                          | 18                         | 15                                  | 6                | 120          |
| Farmers                               | 200                          | 70                          | 45                         | 85                                  | 27               | 427          |
| Other                                 | 34                           | 18                          | 9                          | 11                                  | 4                | 76           |
| (no reply)                            | 22                           | 17                          | 15                         | 19                                  | 9                | 82           |
| <b>16 Suggested improvements</b>      | <b>252</b>                   | <b>103</b>                  | <b>67</b>                  | <b>95</b>                           | <b>29</b>        | <b>546</b>   |
| Format, layout                        | 36                           | 15                          | 7                          | 17                                  | 5                | 80           |
| Contents                              | 92                           | 44                          | 28                         | 30                                  | 10               | 204          |
| General, Other, Requests              | 124                          | 44                          | 31                         | 48                                  | 14               | 261          |
| <b>17 Suggestions future Agrodoks</b> | <b>238</b>                   | <b>79</b>                   | <b>65</b>                  | <b>92</b>                           | <b>30</b>        | <b>504</b>   |
| Referring to Agrodok discussed        | 64                           | 15                          | 22                         | 38                                  | 2                | 141          |
| Animal production                     | 64                           | 8                           | 9                          | 8                                   | 4                | 93           |
| Animal + Plant production             | 18                           | 8                           | 3                          | 4                                   | 2                | 35           |
| Plant production                      | 36                           | 18                          | 8                          | 17                                  | 4                | 83           |
| Other subjects                        | 28                           | 16                          | 12                         | 18                                  | 12               | 86           |
| General, requests, etc.               | 28                           | 14                          | 11                         | 15                                  | 6                | 74           |

#### Annex 4. Gender of respondents by AD subject group

|                           | Animal Production | Plant Production | Food Processing | Soil, Water, Environment | Economics | TOTAL |
|---------------------------|-------------------|------------------|-----------------|--------------------------|-----------|-------|
| Number of Agrodoks        | 9                 | 8                | 6               | 6                        | 1         | 30    |
| TOTAL Number of Responses | 375               | 141              | 100             | 141                      | 43        | 800   |
| Male                      | 350               | 131              | 82              | 139                      | 41        | 743   |
| Female                    | 25                | 10               | 18              | 2                        | 2         | 57    |
| % Male respondents        | 93                | 93               | 82              | 99                       | 95        | 93    |
| % Female respondents      | 7                 | 7                | 18              | 1                        | 5         | 7     |

On the average female respondents make up about 7% of the total. In Food Processing and Storage – typical household concerns – the % rises to 18%; in general issues, like Soil, Water and Environment, female response drops to 1%.

Differences are also evident within subject groups:

|                           |                             |                        |
|---------------------------|-----------------------------|------------------------|
| <b>Animal production.</b> | Rabbits (AD 20)             | 16% female respondents |
|                           | Dairy cattle (AD 14)        | 14% female respondents |
|                           | Goats (AD 7)                | 12% female respondents |
|                           | Pigs (AD 1)                 | 11% female respondents |
| <b>Plant production</b>   | Granaries (AD 25)           | 18% female respondents |
| <b>Food processing</b>    | Grains & pulses (AD 18)     | 33% female respondents |
|                           | Fish & meat (AD 12)         | 20% female respondents |
|                           | Weaning foods (AD 22)       | 20% female respondents |
|                           | Storage trop. prod. (AD 31) | 14% female respondents |
|                           | Dairy products (AD 36)      | 12% female respondents |

In all other Agrodok questionnaires female response is 5-6% or less.