

# GRAIN SA

Annual Progress Report on:

## CONSERVATION AGRICULTURE FACILITATOR

September 2015



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The Promotion of Conservation Agriculture in the North-Eastern Free State

the system, of which on-farm research and the inescapable experiential and social learning that this generates are key elements; both of which critically place the farmer in the central role.

Following the above statement, the new CA programme at Grain SA has been designed and described under the paradigm of IS and was named the CA Farmer Innovation Programme (FIP). The main purpose of the CA FIP is the mainstreaming of CA by and through grain farmers to ensure sustainable use and management of natural resources while enhancing national and household food security and income.

The FIP will be designed to provide direct, fairly simple competitive access to funds for key and interested stakeholders (including farmers) who wish to adapt, develop, or adopt innovations on practices, topics and issues focused on CA. Access to such funding allows a wide range of innovations to be tackled, and under proper conditions may expand enthusiasm and innovation capacity among farmers, other rural stakeholders, and those who support them, ultimately facilitating the mainstreaming of CA within the maize and grain industry.

The CA FIP facilitator has been given the mandate by Grain SA to list the following Key Strategic Objectives (KSO's) for the foreseeable future. These KSO's and themes will be reviewed and or improved every three to five years:

- a) Diagnosis and documentation of CA systems
- b) Awareness, Marketing and Access to Information
- c) Farmer-centred Innovation Systems Research
- d) Incentive and Market Based Mechanisms (IMBMs)
- e) Education and Training
- f) Innovation Platforms, Networks, Social learning, Brokering and Facilitation

Although the CA FIP would not be fully operational in 2014/15 season, it is envisaged that in future (i.e. within a year or two), the Grain SA's FIP portfolio will allocate funds to these KSA's in the following categories:

- a. Solicited research
- b. Non-solicited research
- c. *Ad hoc* services (solicited or non-solicited)
- d. Small Innovation Grants

The Grain SA FIP investment in CA innovation will mainly be through projects and programmes in the solicited and non-solicited categories. Proposals will be invited on an annual basis in these two categories as well as the small grants category, in accordance with the FIP annual funding cycle.

The annual ratio of solicited to non-solicited innovation funds may differ between KSO and also themes within each KSO according to the changing strategic needs of the KSO and the FIP overall.

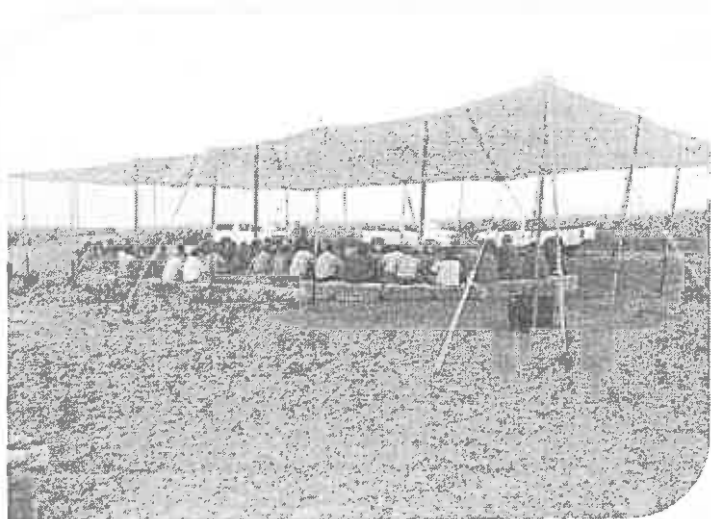
## 2.2. Description of CA systems in various Agro-ecological Regions

The main expected outcome of this process, is a clear and 'pure' description of the CA farming systems (or CA agro-ecosystems) practiced in specific areas or agro-ecological zones (AEZ). It is envisaged that this information (structure and content) could form the basis of any further documentation and updating of information in future, which could also serve as a source document or 'living manual' for farmers interested to start CA in any specific area or AEZ. In this respect an informal agreement has been made with popular magazines, such as SA Grain/Graan, Landbouweekblad, Farmers Weekly and the KZN No-till Club newsletter, to document and publish as many of these successful 'case studies' as possible. A number of pioneer CA farmers have already been visited and a number of articles (between 20 and 30) have been published already. The articles on CA in SA Grain are available from the Grain SA website and the idea is to publish the series in Volumes at a later stage. A range of different institutions (e.g. the ARC and Universities) are also publishing increasing numbers of articles on CA, in SA Grain and other journals/magazines.

## 2.3. Raising awareness on CA

General awareness (or sensitisation) has been experienced as particularly important to stimulate farmers getting involved with further learning activities, such as experimentation. The whole CA farmer innovation process usually needs an 'impulse' or an injection of energy (knowledge) to start or to speed-up the momentum and mostly it is a specific awareness event or sensitisation that achieves that. In this period a number of CA information days have been supported through presentations, such as: the Ascent (Vrede) study group and the Riemland study group in the North-Eastern Free State.

From 11 to 12 March 2015 the CA-FIP supported and coordinated the first CA Conference in the dryer, sandy, western grain producing area of South Africa, which is a major milestone to promote CA in these areas. The conference is being organized in collaboration with the Ottosdal No-till project, with which one of the on-farm research projects is being implemented. An interesting range of topics and speakers were covered combined with field visits to the wide range of on-farm trials in the project (see **Photos 2 and 3**).



**Photo 2:** Hannes Otto, the local project leader and member of the Ottosdal No-till Club, explains CA trial treatments and experiences at a site on his farm.

three days at the end. Both of them participated in the panel discussion before the closing of the event.

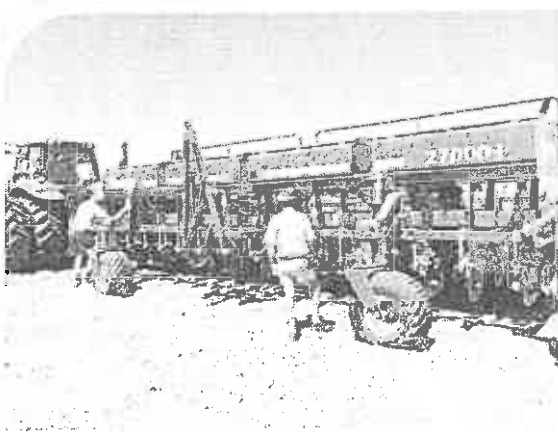
Dr Smith also attended the Western Cape CA Symposium on the 10 September and facilitated a discussion on soil health with the Prieska CA study group on 17 September.

#### 2.4. Participation in Grain SA Regional and Executive Management Meetings

Dr Smith has attended all the Executive Management Meetings as well as two regional meetings (Delmas and Middelburg) during the first quarter to present the purpose and philosophy of the CA FIP at Grain SA. He also discussed CA smallholder systems with the Grain SA Farmer Development Programme at the working group meeting in Bloemfontein on 19 August.

#### 2.5. Grain SA and Argentinian collaboration

The Argentine collaboration has been an important project for Grain SA. A new arrangement to continue the cooperation agreement with Argentina has been developed by both parties during 2014. Final negotiations took place at the NAMPO harvest week in May 2014 and the signing of the new Cooperation Agreement between GSA and Argentina by Jannie de Villiers and the Argentina ambassador, Carlos Sersale di Cerisano, took place on 17 November 2014. The agreement stipulates that existing CA project platforms should be used to implement and demonstrate the Argentina CA system. These platforms are currently all funded by The Maize Trust, i.e. the Ottosdal and SOK projects. It further stipulates that equipment (especially planters) be borrowed to these projects to allow timely use during planting and harvesting periods. The Pierobon planter was allocated to the Ottosdal project and serviced by Valtrac, while the Apache planter was allocated to the SOK project (in Kroonstad) and serviced by FARMQuip.



**Photo 6 (left):** The Apache planter at Kroonstad and **Photo 7 (right):** the Pierobon planter at Ottosdal.

with the evaluation of new CA project proposals and progress/final reports. The panel has successfully assisted The Maize Trust with evaluation of the September 2014 applications and reports and has also been available to assist the WCT when needed.

Three Maize Trust funded research projects, which is hosted under the banner of the CA-FIP at Grain SA, is currently launching various activities in the different study areas. In the North West Province, a project investigates commercial CA practices under semi-arid, sandy soil conditions, while the focus in the KwaZulu-Natal and Eastern Cape project is on challenges facing small holder farmers in the adoption of CA. These CA-FIP projects advocate the Grain SA / Maize Trust's new strategy on CA and strictly follows an on-farm, farmer-led approach, whereby farmers conduct their own experiments, which are properly designed and well supported by researchers, input suppliers and manufacturers. The prime objectives of these projects are to empower farmers and to scale out CA to as many other interested farmers as possible. The latest results show that significant progress and impact have been made in all these projects, which imply that CA crop production systems (in both commercial and smallholder situations) are successfully adapted by and scaled-out to participating farmers, as well as farmers exposed to these project activities through awareness events and publications. **Separate progress reports for these three projects are attached in Appendix 1, 2 and 3.**

A new project has recently been approved and funded by The Maize Trust (MT) and Winter Cereal Trust (WCT) to implement Conservation Agriculture (CA) in two study areas in the North Eastern Free State. The MT project has been initiated by the Grain SA CA Farmer Innovation Programme (CA-FIP) in cooperation with the Riemland (Reitz) and Ascent (Vrede) study groups and aims to investigate, demonstrate and scale out good CA practices in the regions. The ARC-Small Grains Institute (ARC-SGI) at Bethlehem has been funded by the WCT and will cooperate under the same initiative helping to achieve these objectives.

The main activity in these two study areas will be a range of on-farm trials involving various producer co-workers. These trials will focus on a) crop rotations, b) crop density and c) cover crops. Various key aspects will be investigated, in particular soil health, productivity and profitability, and various stakeholders have been involved to take up these responsibilities. On 13 and 14 August meetings have been held with both project teams to plan the trials and other activities. A separate progress report cover the interim period of July to September 2015 is attached in **Appendix 4.**

### 3. CONCLUSIONS AND WAY FORWARD

The following conclusions and recommendations for the way forward are made:

- The CA-FIP at Grain SA has successfully designed, implemented and managed various CA Key Strategic Objectives (KSO's) and projects, mostly funded by The Maize Trust and to a lesser extent by the Winter Cereal Trust. The CA FIP has entered its third year and significant momentum has been built to smoothly steer into the next phase.
- Description and publication of best CA management practices (of producers) in various regions seem to be highly relevant and will continue. Other relevant stakeholders, such

## 4. Summary of CA Maize Trust expenses on July 2015

Project Description	Total Actual YTD Jul15	Total Budget YTD Jun15	Total Budget YTD Jul15 - Sep15	Total budget Jul14 - Sep15	Available to use before end September 2015
CA awareness	122 129	112 932	40 000	152 932	30 803
National Innovation Platform	8 648	50 000	30 000	80 000	71 352
Ottosdal: Soil	74 681	87 200	9 240	96 440	21 760
Ottosdal: Cover crops	113 747	114 920	24 880	139 800	26 053
Ottosdal: Weeds	25 763	25 980	11 520	37 500	11 738
Ottosdal: Agronomy	59 160	59 160	11 520	70 680	11 520
Ottosdal: Grain SA	124 856	122 404	40 000	162 404	37 548
Ottosdal: Farmer facilitator	86 170	90 480	34 824	125 304	39 134
Small Scale Farming (KZN)	500 682	500 000	250 000	750 000	249 318
Small Scale Farming (East)	358 256	502 198	106 749	608 947	250 691
NE FS, Reitz: Soil	-	-	16 100	16 100	16 100
NE FS, Vrede: Soil	-	-	4 900	4 900	4 900
NE FS: Cover crops	-	-	27 200	27 200	27 200
NE FS; Reitz: Agronomy	-	-	12 040	12 040	12 040
NE FS; Vrede: Agronomy	-	-	13 720	13 720	13 720
NE FS; Reitz: Grain SA	-	-	30 000	30 000	30 000
NE FS; Vrede: Grain SA	-	-	30 000	30 000	30 000
NE FS, Reitz: Farmer Facilitation	-	-	18 192	18 192	18 192
<b>Total</b>	<b>1 474 092</b>	<b>1 665 274</b>	<b>710 885</b>	<b>2 376 159</b>	<b>902 067</b>
<b>Plus: Management fee (5%)</b>	<b>73 705</b>	<b>83 264</b>	<b>35 544</b>	<b>118 808</b>	<b>45 103</b>
<b>Grand Total</b>	<b>1 547 797</b>	<b>1 748 538</b>	<b>746 429</b>	<b>2 494 967</b>	<b>947 170</b>