THE FEASIBILITY OF ESTABLISHING A PROFESSIONAL SOUTH AFRICAN EXTENSION AND ADVISORY BODY

By

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Keywords: Professionalism, extension and advisory services, registration, qualifications.

1. INTRODUCTION AND BACKGROUND

The shortage of trained and experienced Agricultural Extensionists in South Africa has been the subject of much debate in recent years. The Department of Agriculture, Forestry and Fisheries (DAFF) has taken active steps to address the shortage of Extensionists in the country through the development and roll-out of its Agricultural Extension Recovery Plan in all nine provinces. While such a plan is a necessary first step in upgrading the country's extension service, a more systematic long-term intervention to ensure the continuous upgrading of Extension skills and knowledge also needs to be put in place given the rapidly changing techno-economic nature of agriculture (Tregurtha, 2008, as quoted by Terblanché, 2010).

It is in this regard that it has been proposed that agricultural extension be formally recognised as a profession, governed by a legal framework, requiring formal registration and continuous professional development. The DAFF formally recognised the need for professionalism in extension in 2005 when it published its' report titled the "Norms and Standards for Extension and Advisory Services in Agriculture".

The study revealed poor Extension: farmer ratios (capacity shortfalls and constraints) and knowledge and skills shortfalls as key and critical issues in addition of others such as a lack of professionalism and commitment and an environment that is not conducive to efficient and effective service delivery.

It is against this background that the South African Society for Agricultural Extension (SASAE), after being requested by DAFF developed a position paper on the feasibility of establishing a professional body for the registration of Agricultural Extensionists and Advisors.

The study addresses the following:

- The pros and cons of establishing a new professional council under the auspices of DAFF or pursuing registration under the South African Council for Natural Scientific Professions (SACNASP);
- The best practice with regards to establishing and managing a professional council. The study will specifically draw on learning's (experiences) of other professional bodies;
- Levels for professional registration;
- Specific qualifications at each level necessary for registration;
- Ways and means of providing recognition for prior learning and experience; and

• Essential elements of Continuous Professional Development (CPD) and mentorship.

2. THE SOUTH AFRICAN COUNCIL FOR NATURAL SCIENTIFIC PROFESSIONS

According to its webpage, the South African Council for Natural Scientific Professions (SACNASP) sets standards for registration and keeps a Register of Professional Natural Scientists. Professional registration identifies persons as highly skilled professionals with technical knowledge and competence. Such persons are identifiable by a suffix to their names such as Pr. Sci. Nat.

Registration is open to all natural science professionals who can demonstrate competence to perform professional work to the necessary standards, and who are committed to:

- Maintain that competence;
- · Work within professional codes; and
- Participates actively within the profession.

(Dr R Becker CEO of SACNASP will provide all the details regarding to SACNASP).

3. THE SOUTH AFRICAN SOCIETY FOR AGRICULTURAL EXTENSION

The South African Society for Agricultural Extension (SASAE) was founded on 23 August 1966. The Society is a Learned Society and other than the SACNASP it has not been enshrined in legislation.

The SASAE has developed into a leading professional organisation enjoying international recognition in spite of not having a fully fledged (full time) Research Institute to assist in the development of the Science of Agricultural Extension. Although the discipline is clearly more Human than Natural Scientific, its role in the promotion of Agricultural Development cannot be questioned. The development of Agricultural Extension as a Science rests in the hands of its academia and practicing field personnel. Not having the backing of a research facility other than some tertiary institutions is a distinct quality-limiting environment. The objectives of the Society are:

- To advance and apply the SCIENCE OF EXTENSION and of rural development as a scientific discipline by stimulating thought, study, research, discussion and the publication and exchange of knowledge both nationally and internationally:
- To promote the professionalism, status and dignity of the EXTENSION PROFESSION amongst the scientific fraternity, the general public and with the studying youth;
- To practice the natural-, economic- and managerial sciences responsibly and in PUBLIC INTEREST; and
- To act as representative MOUTH PIECE for the Extension Profession in Agriculture.

The Society publishes an annual peer reviewed journal, the proceedings of its national conferences and a number of other extension related publications.

4. THE RESEARCH PROCESS

A small task team comprising a representative (Me. D von Maltitz) from the Human Resources Development Support Unit, with Dr. S.E. Terblanché of the Department of Agricultural Economics and Rural Development of the University of Pretoria (and Board member of SASAE) and Dr. B.H. Koch, retired Regional Director (District Manager) of the Department of Agriculture of the Mpumalanga Province were tasked to plan the research process.

A desktop research of relevant documents was undertaken and a questionnaire was developed. The questionnaire was tested for its reliability with credible persons from the Extension fraternity. There after the questionnaire was distributed to key stakeholders who included the Extension Managers of nine provincial departments of agriculture and 13 non-government extension service providers.

The interviews sought to elicit information concerning:

- The possible levels of professional registration;
- The specific qualifications at each level necessary for registration;
- Ways and means of providing recognition for prior learning and experience;
- The essential elements of continuous professional development including mentorship; and
- Any other information that may be identified as necessary arising out of the desktop research.

Other information which would arise out of the research questionnaire are the possible identification of potential partners and role players, recommended priorities (and a possible outline of suggested phases of development), staffing, structure and resource implications, and finding options (including DAFF funding), private sector contributions, government budgets and possible donor sourcing.

On completion of the analysis and interpretation of the questionnaire responses a draft position paper was put to DAFF, for discussion and refinement. The final document includes the relevant inputs made by DAFF.

This study will primarily present the opinion and experiences of respondents from the Public and Private (including Semi-private) institutions separately. Both sectors are taken seriously. One finds little advantage in comparisons except where such comparisons can be contextualized into useful common ground.

5. THE RESEARCH FINDINGS: THE PRIVATE AND SEMI-PRIVATE SECTORS (NON-GOVERNMENT)

Agricultural Extension "helps people to help themselves" voluntarily. Such involvement could be perceived as "a noble calling" given the necessary resources and sufficient time. Unfortunately we often lack the resources and the time. The widening gap between the "haves" and "have nots" in South Africa (even under the new political dispensation) suggests shortfalls which need to be identified and effectively addressed.

5.1 Representations and responses

A total of 13 private and semi-private institutions were chosen to participate. A total of nine institutions responded through their representatives (of which four occupied senior management positions).

5.1.1 Levels of formal education of respondents

Respondents were well qualified in the Natural Sciences and included three PhD's and one with a Masters qualification. The academic qualifications in Agricultural Extension were somewhat weaker (in years) with the B. Tech / B - degree and the Advanced University Diploma being quite popular. Two respondents indicated a Masters qualification in Agricultural Extension.

5.1.2 Levels of experience

The Non-government sector respondents' average years of experience within specific sectors of Agricultural are tabulated as Table 1.

TABLE 1: AVERAGE YEARS OF EXPERIENCE PER SECTOR: NON-GOVERNMENT: EXTENSION FEASIBILITY STUDY (2011)

Sector (Including overlapping years of service)	Average* years of experience in years per relevant respondent	
 Government extension service Private sector advisory services Semi-private advisory services Private consultancy 	4,6 16,7 2,5 5,7 7,0	
Academic 7,0 * Average = arithmetic mean		

5.1.3 Membership of professional bodies/societies

Membership and participation in the activities of professional bodies (learned societies) can be considered the life-blood of the respective profession. It is considered an integral component of Continuous Professional Development (CPD) which has become mandatory as a process within many professions.

The content of Table 2 suggests that field practitioners (including serving Extensionists) have a high regard of professional societies and Associations that specialise in specific groupings of the Natural Sciences. Their interest in the SASAE and to some extent the SACNASP appears less pronounced.

TABLE 2: FIELD PRACTITIONERS ALIGNMENT TO THE SASAE AND SACNASP: EXTENSION AND FEASIBILITY STUDY (2011)

Professional body	Membership	
1 Totobolonial Body	Yes (%)	No (%)
South African Society for Agricultural Extension (SASAE)	22,2	77,8
 South African Council for Natural Scientific Professions (SACNASP) 	33,3	66,7
Other professional bodies*	77,8	22,2

* Other professional bodies include:

- > The Grassland Society of South Africa
- The Agronomist Association
- > The South African Sugar Cane Technologists' Association (SASTA)
- > The Soil Science Society of South Africa
- The Soil Surveyors Association of South Africa
- > Southern African Wildlife Management Association
- > South African Society for Viticulture and Oenology

5.1.4 The pros and cons of SASAE membership

The pros and cons of membership of a specific Organisation, Society or Association is very much an issue of opinion based on first experiences and/or future hopes and of course perceptions (which may or may not be substantiated by facts). The SASAE and its tertiary (academic and research) partners have become the scientific "home" of many Extensionists. Its annual registration fees are generally considered fair and affordable while the Society's financial standing is considered firm (healthy). The categorization of membership is considered fair and appropriate. The arrangement that Agriculture Diplomats can upgrade their classification after the successful completion of five or more years of appropriate experience is welcomed (although questions could be raised concerning the applicability of practical experience of lecturing staff).

On the "flipside" the Society is also facing its own challenges of which the following have been listed by respondents as worthy for consideration namely:

- The Society is inclined to offer little of value for the Extensionist of the Commercial Farming Sector. The emerging sector is well catered for; and
- The SASAE is unfortunately perceived by many as just "another government body lacking direction and enthusiasm". It could also be branded by some as a grouping "for old white academics".

Of importance is the comment that Extensionists should be registered as professionals with appropriate quality assurance.

5.1.5 The pros and cons of SACNASP membership

The responses confirm that SACNASP (as a regulatory body) enjoys a high level of respect and authority. It is suggested that Extension should aspire for similar professional status. The legitimacy of SACNASP is accepted. The

Council's endeavours to set high standards of competency and professionalism are recognized.

Practitioners are concerned about:

- The relative high annual registration fees of SACNASP;
- The limited feedback of SACNASP to its members; and
- The work situation of less qualified extension workers performing necessary developmental/extension duties, while not being eligible for SACNASP membership.

Considering the comments made it becomes clear that Extensionists require a legal form of professional recognition similar to the recognition presently offered by SACNASP for Natural Scientists. Two aspects have been emphasized namely:

- The need to upgrade qualifications in the Natural as well as the Extension Sciences in those cases where field workers are under qualified; and
- To effect qualification upgrades and professional registration while maintaining quality standards.

5.1.6 Funding and deployment

The Extension Advisory Service of the participating respondents is funded privately through levies and other sources. The majority

(66,7 percent) work within geographically defined areas and are commodity focused while the remaining functions on a national basis.

The participating organizations indicated a total of 80 extensionists / advisors/consultants in their employment.

5.1.7 Education and Training levels of practicing Extensionists

Education and Training are fundamental requirements for sustainable agricultural development. This is true for the developer (extensionist) as well as his/her clients. The total packages of qualifications spread over the 80 practicing Extensionists who are presently deployed within the organisations under discussion are the following:

- 16,3 percent fieldworkers have attained a two-year certificate or diploma qualification. At present these workers cannot be professionally registered with SACNASP although they are actively pursuing developmental objectives;
- 53,1 percent practitioners have a 4-year B.Sc Agric qualification which, together with the relevant practical experience, are ideally qualified for registration as Professional Natural Scientists;
- Only 7,5 percent practitioners have an Honours or higher qualification in Extension. Only 18, 8 percent have had some formal exposure to the Extension disciplines, while 30,0 percent has participated in Extension and related skills programmes.

Although there are shortfalls in the Natural Science qualifications, the shortfalls in Extension training are far more significant. The logistics and costs involved to address these shortfalls and to train incoming (new) incumbents to the required level of excellence are staggering.

Learned Societies could play a role to at least sensitise practitioners to the above challenges (i.e. through targeted awareness programmes).

Only 12, 5% are registered as members of SASAE, 6, 3% with SACNASP while 43, 85 are registered with other Learned Societies.

5.1.8 Shortcomings as perceived by the leaders of Extension personnel

The question was passed to the leaders of Extension personnel concerning the minimum qualification deemed necessary (by them) for a field Extensionist to be productive/effective. Their opinions were clear namely that they considered:

- Two years (or less) of training in Agricultural Extension to be sufficient;
 while
- Two years (or less) of training in the Natural (Agricultural) Sciences was considered unacceptable.

A follow-up question asked the respondents to rate the present training shortfalls in their field staff using a 4-point scale with "4" indicating the most serious shortcoming. (The 4-point scale was used to remove the "comfortable" central value of unevenly numbered scales.) The ratings were averaged (using arithmetic means) and revealed the following:

The present Natural/Agricultural Science training.

Average rating as shortcoming: 1,38

• The present Agricultural Extension training.

Average rating as shortcoming: 3,25

These figures suggest that in spite of leaders being relatively modest in

terms of the minimum training requirement in Agricultural Extension and in spite of quite a number of Extension practitioners having undergone formal training in Extension, the shortfall of Extension skills in the field are being perceived (by the leaders) as serious (i.e. falling within the fourth (top) quartile).

The same respondents rated the general working knowledge of their Extension staff as **3**, **4** (on average) for the Natural/Agricultural Sciences and as specialists of their wards (i.e. able to define the "Ten best practices" in their wards). In this case "4" was defined as the highest/most acceptable rating. For Extension Sciences the rating declined to a significantly lower rating of 2,25. **Irrespective of how the question was asked, the responses suggest serious shortcomings in the training and practice of Agricultural Extension among field officers.**

5.1.9 Possible training priorities

Extension training programmes have been researched and developed over many years in South Africa and elsewhere. Training programmes are offered in different packages and with different emphases by different training institutions. The training package outlined in Table 3 reflects a balanced and reasonable inclusive package of possibilities and (if need be) specialization and was identified by the Standard Generating Body (SGB) for Extension. The Extension leaders/representatives were asked to rate the importance of academic knowledge within each speciality on a 4-point scale (with "4" as the most important). Their ratings were averaged and are presented as follows (ref. Table 3).

TABLE 3: THE IMPORTANCE OF ACADEMIC KNOWLEDGE WITHIN SPECIFIC SPECIALIZATIONS: EXTENSION FEASIBILITY STUDY (2011)

Speciality/Study material (module)	Average rating on 4-point scale with "4" as the most important
 Extension Philosophy, organization and management Communication Leadership and group dynamics Community development and rural sociology Extension evaluation Principles and approaches of development and 	3,20 4,00 3,55 2,44 3,33 3,33
 extension Program and Project planning Adoption and Diffusion Development principles: Theory and practice 	3,22 3,55 3,11

It is clear from the above that "communication" is considered of utmost importance, having attained the highest (and unanimous) rating by all respondents. "Community development and Rural sociology" and "Development principles: Theory and practice" are regarded as the least important.

Everything falling within the fourth quartile (i.e. ratings of above 3, 0) should be considered important for this sector.

Asking the respondents what modules they would include in a possible training package underlines (or further emphasises) what has been indicated above. Their opinions are set out in Table 4.

TABLE 4: SUGGESTED CONTENT OF AN IN-SERVICE TRAINING PACKAGE FOR NON-GOVERNMENT EXTENSIONISTS: EXTENSION FEASIBILITY STUDY (2011)

Speciality/Study material (module)	Number of respondents/leaders answering in the affirmation ("yes")
 Extension Philosophy, organization and management Communication Leadership and group dynamics Community development and rural sociology Extension evaluation Principles and approaches of development and extension 	8 8 7 3 7 6
 Program and Project planning Adoption and Diffusion Development principles: Theory and practice 	7 6 2

As suggested by the previous findings (ref. Table 3) the modules "Community Development and Rural Sociology" and "Development principles: Theory and practice" are considered the least important. The modules:

- Communication;
- Extension Philosophy, organization and management;

- Leadership and group dynamics;
- · Extension evaluation; and
- Program and project planning;

should decidedly be included in such a training package. The identification of study material suggest the nature of challenges facing the field personnel of non-government extension services which can hopefully be addressed more effectively with the appropriate theoretical (academic) backing.

5.1.10 Possible training methods and incentives

There are a multitude of possible training methods/options which could be applied individually, in series or in parallel depending on needs and specific situations. The content of Table 5 reflects the intensity of support of each option as perceived by the relevant leaders/heads of components. The support rating was calculated as the average (arithmetic mean) of individual ratings according to a 4-point scale with "4" as the most important/desirable.

The results indicate that formal tertiary training such as part-time training programmes by Universities is considered the most likely option to succeed followed (probable simultaneously) by directed mentorship programmes. It would appear that respondents are reasonably satisfied with the content and mix of present diploma training packages.

The option of Board Examinations by Learned Societies does not appear to be an option. (Societies are probably not geared to offer and process such examinations.)

Should policy makers decide to involve tertiary institutions in such training initiatives and following them up with specialized mentorship programmes involving experienced field staff, the table could be set for a viable and mutually beneficial relationship between academics and field practitioners.

TABLE 5: THE IMPORTANCE RATING OF POSSIBLE INPUTS TOWARDS THE IMPROVEMENT OF EXTENSION SKILLS AND OUTPUT: EXTENSION FEASIBILITY STUDY (2011)

Education and training option	Desirability rating with "4" as the most desirable*	Ranking with "1" as the most important
Loornorphine through the AgriCETA	2.66	6
Learnerships through the AgriSETA Page 1 average 1 average 1 average 2	2.40	8
Board examinations by Learned Societies		
 Other forms of specialized examinations (linked to individual ward situations) 	2.25	9
Rewards by employer for additional skills attained	3.30	3
Formal tertiary institution involvement (e.g. part-time training programmes)	3.77	1
, , , , , , , , , , , , , , , , , , , ,	3.55	2
Mentorship programmesA re-evaluation of content and mix of Diploma	2.66	6
training Improvement of language skills (particularly	2.55	7
 English writing skills) Membership of Learned Societies (and presence/participation at their conferences) 	2,9	5
The implementation of the process of Continuing Professional Development (CPD)	3,1	4
* Expressed as averages (arithmetic means)		

As a follow-up respondents were asked which option would to their mind offer the best chances to succeed and which were the least likely to succeed. The results indicate the number of votes cast (responses) per option (with each respondent having a maximum of three votes).

The involvement of tertiary institutions (7 votes) linked to mentorship programmes (4 votes) enjoy strong support, while the implementation of a process of CPD (6 votes) and the consideration of rewards (5 votes) by the employer for additional skills attained also came out strongly. Mentorship and CPD are relatively closely linked while monetary rewards would require a reliable method (technique) of performance evaluation.

5.1.11 Opinions of Extension leaders/managers concerning Membership of SACNASP

Respondents were asked to what extent their organization agrees to the regulations and requirements according to SACNASP for profession registration. The regulations and requirements were fully presented in writing to respondents before their responses were recorded. Only 25 percent fully agreed to all aspects of SACNASP requirements. The remaining participants preferred the "No" or "No opinion" options. Asked about their uncertainty the respondents pointed out that:

 In the less sophisticated situations, two year diplomas have proved adequate. In such situations well motivated and substantiated practical experience should be accepted to make up for possible academic shortfalls. Such acceptance (compromise) would open career possibilities for technicians and could serve as motivation to deliver superior outputs (which in turn could serve as bases for financial rewards).

- The perceived high annual membership fees of SACNASP relative to the limited feedback of SACNASP to its members raises questions whether membership offers tangible value for money.
- The practical situation of insufficient academic training of many Extension practitioners (in terms of SACNASP registration requirements) raises questions concerning alternatives. Further academic study is relatively difficult for established practitioners. One can hopefully assume that many Extensionists are willing (yet practically unable) to involve themselves in further academic study.

On the positive side it was indicated that Extension should be recognized as a profession that requires minimum standards/qualifications to maintain its status as a professional vocation. A closer association with SACNASP would promote legitimacy as SACNASP currently carries respect and authority (in this respect) above other bodies. Extensionists should be officially mandated to do specific specialized tasks and to make recommendations pertaining to such tasks.

5.1.12 Professional registration and the SASAE

Should the SASAE in co-operation with the DAFF reach an agreement with SACNASP to register Agricultural Extension Advisors in the technical agricultural field with SACNASP, the next important step would be the registration of Agricultural Extension Advisors as a specific field of excellence and the recognition of the extension qualification as an additional prerequisite for the professional registration of extensionists. The present categorization of extensionists is based on the package of technical, extension and experiential qualifications and is done as an in-house (internal) exercise. All members of the SASAE carry their specific ranking which is accommodated in the Constitution of the SASAE but without legislative support, as is the case with SACNASP.

Should the SASAE and DAFF decide to go the independent route the cost and logistical implications in terms of gaining legislative coverage, establishing the necessary administrative and managerial structures (including office accommodation), the personnel, and the involvement of councillors and support staff would be astronomical. Alternatively the SASAE and its Board could be tasked with the responsibility to evaluate and recognize extension qualifications and to re-evaluate its categories of registration to be in line with SACNASP which could include the establishment of new revised categories such as:

• Professional Agricultural Extension Advisory Scientist

Qualifications: 4 year B.Sc Agric plus a Honours degree in Extension and/or Masters qualifications in Extension.

Extension Advisory Technologist

Qualification: 4 year B.Tech. degree/National Higher diploma plus Honours degree in Extension or 160 credits in Extension at Honours or Masters level.

Extension Advisory Technician

Qualifications: Three year B. Agric/National Diploma plus a diploma in Extension or 120 credit (higher certificate qualification) at NQF Level 6 (first degree level).

It should be noted that (for obvious reasons) no SASAE categorization is possible without a technical (Natural Science) qualification in Agriculture.

5.1.13 Opinions of Extension leaders/managers concerning SASAE membership and related issues.

Managers/leaders responded to the question concerning their agreement (or disagreement) with the Societies' present regulations and requirements as follow:

- 57,1 percent fully agreed;
- 14,3 percent agreed only partially agreed; and
- 28,6 percent were in disagreement.

The following reasons were given for disagreement, namely:

- The SASAE places too heavy an emphasis on the subsistence farming sector with the extension staff of the Commercial sector not receiving value for money: and
- Uncertainty about "academic experience" qualifying as "practical experience".

On the positive side the respondents acknowledged that the SASAE:

- Is effectively networked throughout the country and after many years of existence (since 1966) understands Extension (although some revamping of the Society could be considered);
- Is aware of new developments;
- Promotes professional (intellectual) growth through exposure (at national as well as branch levels);
- Offers coordinated training options (based on needs); and
- Promotes professional quality.

Concerning the issue of who should take the responsibility of quality assurance of agricultural extension qualifications there was reasonable consensus that the SASAE as a Voluntary Professional Association or otherwise a newly established committee (of the SASAE) should be responsible for the task (75,0 percent). It would appear that the SASAE is mostly considered satisfactorily credible and capable to asses/evaluate the standard of extension training of its members. This option should be further pursued by the Society as an additional service to its members and the (Natural) Scientific fraternity in general.

Nobody considered the present costs for SASAE registration and its annual fees unacceptable. In spite of the fees being considered reasonable the respondents indicated that the employer/service provider should pay the fees on behalf of the extensionist (75,0 percent) or alternatively that the employer and the advisor should share the costs (25,0 percent).

5.1.14 Implications of compulsory registration

In the event of registration becoming compulsory, 50,0 percent respondents were of the opinion that the existing structures of SACNASP and the SASAE would be acceptable, with 25,0 percent indicating uncertainty. Only 25,0 percent responded in the affirmation with the balance indicating a clear "no" or otherwise indicating uncertainty or abstaining from indicating an opinion. The above is a re-confirmation that the existing structures of SACNASP and the SASAE are considered suitably positioned to manage a possible compulsory registration process for extensionists.

What are considered sufficient reason to motivate field staff to participate in further training? Managers/leaders opinions have been set out and ranked in Table 6. The rating was done on a 4-point scale with "4" indicating the most important (highest) level of motivation. Responses were averaged (arithmetically) to indicate possible rankings.

TABLE 6: RELATIVE IMPORTANCE OF FACTORS MOTIVATING EXTENSION STAFF TO PARTICIPATE IN FURTHER TRAINING: EXTENSION FEASIBILITY STUDY (2011)

Probability rating with "4" as the most probable/desirable	Ranking with "1" as the most important
3.75	1
3.25	3
3.0	5
3.2	4
2.3	6
3.4	2
2.3	6
	"4" as the most probable/desirable 3.75 3.25 3.0 3.2 2.3 3.4

The possibility of extensionists being in a better position to serve their clients has been indicated as the most important motivator (as can be expected from the perspective of the manager/leader). "Addressing trainee aspirations in terms of income, status etc." And "Recognition by way of salary increase by employer" was placed in the second and third positions respectively. The employees would probably agree with such a perspective. To "Make training compulsory" was also considered to be of significant importance. Obviously "Peer pressure" and the "Clarification of perceptions/misperceptions" were not regarded to be of particular importance/significance. Checking the reliability responses by way of cross-questions confirmed the above.

6. THE RESEARCH FINDINGS: GOVERNMENT SECTOR

South Africa has a very large rural population of which a significant number (if not the majority) depend on the land for their livelihoods.

Agriculture is the basis of their economy with household food security initiatives and small scale subsistence farming ventures assuming important roles. Although the

private and semi-private sectors play an important role in the upliftment of rural communities the final responsibility for poverty alleviation rests with government (and through government – with every citizen of this country).

6.1 Representations and responses

The Agricultural Departments of all nine provinces were requested to participate in the study by completing the same structured questionnaire as was used for the private and semi-private institutions. The data from a total of 16 completed questionnaires is reflected in this report. Two questionnaires were completed by retired extension managers who were requested to participate because of their specialized (and scarce) experiences in the field and on Extension and developmental bodies (such as the SASAE).

6.1.1 Levels of formal education of respondents

All respondents were agriculturally (scientifically) qualified with 68,8 percent being university graduates (the rest being diplomats).

As far as academic training in Agricultural Extension is concerned only 56, 3 percent indicated that they had attained such qualifications, of which 33, 3 percent with Master's and Doctoral degrees.

Analyzing the picture as a whole we could estimate that only 38,7 percent of respondents could be regarded as sufficiently qualified for professional registration under SACNASP and the SASAE simultaneously. This being the situation within the more senior ranks one would expect a significantly lower figure among (Extension) field personal.

This suggests the need for a separate level of registration to accommodate such field staff and therewith to include them into a Professional "Natural Science / Agricultural Extension" grouping with its own specific privileges and advantages.

6.1.2 Levels of experience

The government sector respondents' average years of experience within specific sectors of Agriculture are tabled in Table 7.

TABLE 7: AVERAGE YEARS OF EXPERIENCES PER SECTOR: GOVERNMENT: EXTENSION FEASIBILITY STUDY (2011)

Sector	Average* years of experience in years	
(Including overlapping years of service)	per relevant respondent	
Government Extension Service	20,1	
 Private Sector advisory services 	5,5	
Semi-private advisory services	3,0	
Private consultancies	5,5	
Academic	1,0	
Other	5,5	
* Average = arithmetic means		

6.1.3 Membership of professional bodies/societies

Membership and participation in the activities of professional bodies/ learned societies (Table 8) can be considered the life-blood of the respective profession. It is considered an integral component of Continuous

Professional Development (CPD) which has become mandatory as a process within many professions.

TABLE 8: FIELD PRACTITIONERS ALIGNMENT TO THE SASAE AND SACNASP: EXTENSION FEASIBILITY STUDY (2011)

Professional body	Memb	ership
	Yes (%)	No (%)
South African Society for Agricultural Extension (SASAE)	87,5	2,5
South African Council for Natural Scientific Professions (SACNASP)	2,5	87,5
Other professional bodies* (Details not indicated)	12,5	87,5

Other than the private and semi-private sectors who place a heavy emphasis on their membership of professional bodies (other than the SASAE) and who value SACNASP membership, government extensionists are loyal supporters of the SASAE with 87,5 percent of respondents belonging to this society.

Only 12,5 percent (of respondents) of government Extensionist belong to SACNASP or to other scientific bodies.

The patterns of scientific involvement indicated above do however not suggest that government extensionists do not expose themselves to other forms of professional development. The figures contained in Table 9 and 10 suggests a clear commitment among members of this sector to improve their scientific expertise in the natural (agricultural) sciences and technologies as well as the extension sciences. The figures represent the national situation (i.e. all members of personnel, from all nine provinces).

TABLE 9: NUMBER OF EXTENSION STAFF CURRENTLY ENROLLED AT HIGHER INSTITUTIONS TO IMPROVE THEIR (SCIENTIFIC) AGRICULTURAL QUALIFICATIONS (TROUGH CASP AND OTHER BURSARIES): EXTENSION FEASIBILITY STUDY (2011)

Qualifications	Number of extension staff (Nationally)
Two year higher certificate	15
Three year diploma	11
Four year Higher diploma	4
Three year B.Agric	19
Three year B.Sc Agric	3
Four year B. Tech Agric	321
Four year B.Sc Agric	40
Any post graduate qualification in Agriculture	146
Any other agricultural qualification	6
Total	565

A large number of extension staff is enrolled for the B Tech degree in Agricultural Management and Extension (40 credits only in Extension).

TABLE 10: NUMBER OF EXTENSION STAFF CURRENTLY ENROLLED AT HIGHER INSTITUTIONS TO IMPROVE THEIR EXTENSION QUALIFICATIONS (TROUGH CASP AND OTHER BURSARIES)

Qualific	ations	Number of extension staff
	Extension modules in undergraduate Agricultural qualification	23
•	National Certificate in Extension	-
	Advanced University Diploma in Agricultural Extension and Rural Development	19
•	B. Inst. Agrar. Hons: Extension	26
•	B.Sc Agric Hons: Extension	-
•	Masters and Doctoral (PhD) qualifications in Extension	8
• ,	Any other extension qualification	-
	Total	76

Based on the assumption that government employs approximately 2200 Extensionist it would appear that close to a third (i.e. 29,1 percent) have actively committed themselves to improve their academic standing.

Although a Level 2 category of Certified Natural Scientists will often be a meaningful way of accommodating those who, due to circumstances, are considered "valued yet under-qualified", it is nevertheless heartening to observe that many are making concerted efforts to improve their academic qualifications may hopefully qualify for SACNASP registration within the present benchmarks – given sufficient time to complete their studies.

6.1.4 The pros and cons of SASAE membership

With such a high level of SASAE membership (87,5 percent of respondents) one would expect relatively high positive sentiments towards the organization. The following reasons have been indicated as positives of membership, namely:

- a) Members have access to publications and information;
- b) Members are given opportunity to attend conferences and symposia and are offered the opportunity to share experiences;
- c) The SASAE is a professional body "with a heart" i.e. it can assist its members on a wide spectrum of issues;
- d) The majority of Extensionists qualify for membership;
- e) The Society provides opportunity to build capacity, to network with others and to share ideas;
- f) The SASAE builds professionalism and a credible professional image;
- g) Professional growth is promoted through exposure.

A number of issues were listed on the flipside as "cons", namely:

- A lack of motivation by employers (who frequently lack academic Extension qualifications);
- Annual fees are paid by members themselves (which could however also be interpreted positively as an indication of member commitment);
- A "Recognition of prior learning" route is not accessible to potential members lacking academic training in Extension (Associate membership, although offering entry of such members, has limitations in terms of voting);

- The SASAE should possibly have a re-look at its registration categories (this being envisaged should formal linkages with SACNASP become a reality); and
- In spite of all the above field practitioners can still be considered as insufficiently trained in Extension.

6.1.5 The pros and cons of SACNASP membership

On the positive side:

- SACNASP is accepted as a body empowered to enforce an Act of Parliament and that it does so according to guidelines which are strictly adhere to;
- b) Prior learning can be recognized where appropriate;
- c) Registered Natural Scientists are bound to strict guidelines ("Code of ethics")
- d) The system could motivate practitioners to improve their academic status.

Respondents listed the following negative considerations, namely:

- The registration process is too time consuming;
- Annual membership fees are perceived as high;
- Many practitioners do not qualify for SACNASP registration due to high academic entry requirements (This could to a certain extent be addressed by the proposed Certificated (level 2) classification; and
- The perceived "returns" of annual membership fees is often perceived as being too low.

6.1.6 Education and Training levels of practicing Extensionists

It is generally accepted that perceptions and aspirations are the prime motivators for change. Knowledge plays a role by improving the quality of decision making and hence the relatively wide support of the principle of informed decision making. The nature and composition of training packages of Extension practitioners is reflected in Table 11. The data contained in Table 11 reflects the nature and composition of training packages of most government Extension practitioner's nationwide (i.e. out of an estimated national total of 2200 practitioners).

TABLE 11: THE NATURE AND COMPOSITION OF TRAINING PACKAGES OF EXTENSION PRACTITIONERS: EXTENSION FEASIBILITY STUDY (2011)

Qualification categories	Number of Extension
	practitioners
	(including overlaps and
	with sub-totals in brackets)
A. Agricultural qualifications not recognized by SAQA and	
SERTEC	
In service training	(-)
Agricultural qualifications recognized by SAQA and SERTEC	`,
Two year higher certificate	31
Two year diploma	87
Three year diploma	1119
Four year diploma	3
Three year B.Sc/ B Agric in Agriculture	248
Four year B.Tech Agric	319
Four year B.Sc Agric	203
Other	97 (2106)
B. Extension qualifications	` , , , , , , , , , , , , , , , , , , ,
National Certificate in Extension (NQF6)	32
Extension modules completed in undergraduate agriculture training	416
Advanced University Diploma in Agricultural Development and	
Rural Development (NQF6)	12
B. Inst.Agrar. Hons (Extension)	15
B.Sc Agric.Hons (Extension)	72
Masters and Doctoral qualifications in Extension	52 (547)
C. Skills qualifications (Short courses registered with SAQA)	
Technical Agricultural skills programmes	560
(4 provinces)	
Extension and related skills programmes	505
(5 provinces)	
Other (e.g. Computer literacy)	120 (1185)
(2 provinces)	120 (1100)

The figures suggest the following:

- 118 Fieldworkers (5,4 percent) have attained a two-year certificate or diploma qualification. At present these workers (employees) cannot be professionally registered with SACNASP although they are actively pursuing developmental objectives;
- 203 Practitioners (9,2 percent) have a 4-year B.Sc Agric qualification which, together with the relevant practical experience, are ideally qualified for registration as Professional Natural Scientists;
- 139 Practitioners (6.3 percent) have an Honours or higher qualification in Extension. Only 547 out of an estimated total of 2200 (i.e. 24,9 percent) have had some formal exposure to the Extension disciplines.

As far as membership of Learned Societies is concerned 745 field (Extension) practitioners are registered with the SASAE nationally with 30 being registered with other learned societies and only 7 with SACNASP (according to the SASAE database).

6.1.7 Shortcomings as perceived by the leaders of Extension personnel Respondents were asked to indicate the minimum academic training that they deemed necessary for effective extension work (irrespective

of SACNASP benchmarks). A total of 75,0 percent of leaders indicated a four year Natural/Agricultural Science qualification with 18,8 percent indicating a three year qualification as sufficient. (The balance preferred more than 4 years of academic training).

In terms of Extension training 50 percent were of the opinion that 1 to 2 years of academic training would be sufficient.

Asked about training shortfalls with ratings on a 4-point scale where "4" represents the most serious shortcoming, the average ratings (using arithmetic means) were as follows, namely:

- The present Natural/Agricultural Science training.
 - Average rating as shortcoming: 2,6
- The present Agricultural Extension training.

Average rating as shortcoming: 2,9

Both ratings fall within the third quartile, i.e. are reasonably close to the fourth quartile which would indicate serious shortcomings.

Considering the above one would be inclined to think that it would be wiser to invest money into improved training initiatives rather than to increase the number of field Extensionists. One could similarly focus on improving the nature of extension leadership by promoting a better understanding/awareness of extension principles.

6.1.8 Possible training priorities

As was done with the non-government sector, respondents from the government sector were asked to rate specific aspects of academic knowledge on a 4-point scale with "4" being the most important. The outcomes are listed in Table 12 as averaged responses (arithmetic means).

TABLE 12: THE IMPORTANCE OF ACADEMIC KNOWLEDGE WITHIN SPECIFIC SPECIALIZATIONS: EXTENSION FEASIBILITY STUDY (2011)

Speciality/Study material (module)	Average rating on 4-point scale with "4" as the most important
 Extension Philosophy, organization and management 	3,3
Communication	3.5
Leadership and group dynamics	3,2
Community development and rural sociology	3,1
Extension evaluation	2,9
 Principles and approaches of development and extension 	3,1
Program and Project planning	3,1
Adoption and Diffusion	3,2
Development principles: Theory and practice	2,7

As for the non-government sector, "Communication" is rated as the most important followed by "Extension Philosophy, organization and management", "Leadership and group Dynamics" and "Adoption and Diffusion" in that sequence. "Development principles: Theory and practice" is regarded as the least important although "Development" must be seen as the prime objective of government Extension.

When asked to package an in-service training curriculum in Extension, the numbers of affirmative answers were recorded and are presented in Table 13.

TABLE 13: SUGGESTED CONTENT OF AN IN-SERVICE TRAINING PACKAGE FOR GOVERNMENT EXTENSIONISTS: EXTENSION FEASIBILITY STUDY (2011)

Speciality/Study material (module)	Number of respondents/leaders answering in the affirmation ("yes")
 Extension Philosophy, organization and management Communication Leadership and group dynamics Community development and rural sociology Extension evaluation Principles and approaches of development and extension Programme and Project planning Adoption and Diffusion Development principles: Theory and practice 	10 15 16 5 12 13 9 11

The subject "Leadership and Group Dynamics" and "Communication" are clearly considered the most important. The subjects "Principles and approaches of development and extension", "Adoption and Diffusion" and "Extension evaluation" are also given high priority (as was the case with the non-government sector). Based on the above one could probably develop a training package that would serve both the non-government and the government sectors equally well.

6.1.9 Possible training methods and incentives

The question now becomes relevant as to who would be best suited to offer the training package in the Extension Sciences. The content of Table 14 offers a possible scenario of options.

TABLE 14: THE IMPORTANCE RATING OF POSSIBLE INPUTS TOWARDS THE IMPROVEMENT OF EXTENSION SKILLS AND OUTPUT: EXTENSION FEASIBILITY STUDY (2011)

Education and training option	Desirability rating with "4" as the most desirable*	Ranking with "1" the most important		
Learnerships through the Agri SETA	2.5	10		
Board examinations by Learned Societies	2.8	7		
Other forms of specialized examinations	2.9	6		
(linked to individual ward situations)		_		
Rewards by employer for additional skills	3.4	5		
attained	3.9	1		
Formal tertiary institution involvement (e.g.	0.0	•		
part-time training programmes)	3.7	3		
Mentorship programmes A re evaluation of content and mix of Diplome				
 A re-evaluation of content and mix of Diploma training 	2.7	9		
Improvement of language skills (particularly Facility language skills)	2.8	8		
English language skills)				
 Membership of Learned Societies (and presence/participation as their conferences) 	3,5	4		
The implementation of a process of continued				
Professional Development (CPD)	3,6	2		
*Expressed as averages (arithmetic means)				

It is clear, that the involvement of tertiary training institutions is regarded as the most important option, followed by the process of Continued Professional Development (CDP) and mentorship programmes, in that sequence. The nongovernment sector reflected similar sentiments indicating that the two sectors could possibly co-operate to achieve a common goal (although they will probably differ in the detail).

The likelihood of success (or failure) is set out in Table 15 (as opinion polls). Each respondent was permitted a maximum of three votes.

TABLE 15: AN EVALUATION OF TRAINING OPTIONS IN TERMS OF THEIR LIKELIHOOD TO SUCCEED: EXTENSION FEASIBILITY STUDY (2011)

Education and Training options	Most likely to succeed*	Least likely to succeed**
 Education and Training options Learnerships through the Agri SETA Board examinations by Learned Societies Other forms of specialized examinations (linked to individual ward situations) Rewards by employer for additional skills attained Formal tertiary institution involvement (e.g. part-time training programmes) Mentorship programmes A re-evaluation of content and mix of Diploma 	\$ucceed* 4 1 - 10 7 5	8 11 5 1 2
training Improvement of language skills (particularly English writing skills) Membership of Learned Societies (and presence/participation at their conferences)	-	7 3
The implementation of a process of Continuing Professional Development (CDP)	5 9	3

^{*} The highest count indicates the option most likely to succeed.

The options perceived as most likely to succeed are "rewards by employer for additional skills", the "implementation of the process of CDP" and "formal tertiary institution involvement". There appears to be little support for "Board examinations by Learned Societies" and "Leanerships through the AgriSETA. The figures also indicate little concern about the "mix and content of Diploma training".

6.1.10 Opinion of Extension leaders/mangers concerning membership of SACNASP

A total of 62,5 percent fully agreed with the regulations and requirements set by SACNASP for registration purposes.

A total of 43,8 percent indicated the annual registration fees of SACNASP as acceptable with the balance falling in different degrees of non-acceptability. Irrespective of the fees the dilemma facing many practitioners is that

they may become (legally) unemployable should they not register with SACNASP and that the problem is compounded in those cases where officials render important services (and are considered competent to

^{**} The highest count indicates the option least likely to succeed.

do so) while their qualifications are insufficient. SACNASP (and possibly the SASAE) should pursue possible ways and means to address the challenge.

6.1.11 Professional registration and the SASAE

The majority of respondents (81,3 percent) fully agree with the present regulations and requirements concerning SASAE benchmarks for registration with the SASAE. The present categories have been set out under paragraph 5.1.12 above and will probably need some adjustment to synchronize with SACNASP. The SASAE would probably be in a position to do its own screening/evaluation of candidates/applicants in terms of the Extension expertise of applicants.

6.1.12 Opinion of Extension leaders/managers concerning SASAE membership and related issues

There appears to be a general concern about the lack of academic training of many practitioners. Not once did any leader/manager indicate understaffing as a critical concern. Judging by the relatively low number of clients (just over 170) per practicing extensionist (for the government Extension service) one would be inclined to agree that the insufficiency of training is a more pressing constraint than lack of numbers.

The Recognition of Prior Learning (RPL) route is indicated by some as possible alternative to certain academic limitations. Although of practical significance in some situations this will not be an acceptable alternative to address the lack of shortfalls.

6.1.13 Implications of compulsory registration

In the event of professional registration becoming compulsory 62,5 percent of Extension respondents preferred the existing SACNASP and SASAE structures. The SASAE cost structure is acceptable to 75,0 percent of respondents.

According to the figures presented as Table 16, the respondents, who primarily perceive the situation form a managerial point of view are of the opinion that linking salary increases to improved/additional qualifications would serve as a prime motivator for serving extensionist to become involved in such training exercises.

TABLE 16: RELATIVE IMPORTANCE OF FACTORS MOTIVATING EXTENSION STAFF TO PARTICIPATE IN FURTHER TRAINING: EXTENSION FEASIBILITY STUDY (2011)

Motivating factor	Probability rating with "4" as the most probable/desirable*	Ranking with "1" as the most important
 Trainee better qualified to assist clients Recognition by way of salary increase by employer Improved opportunities for promotion Make training compulsory Peer pressure Addressing trainee aspirations (income, status, etc.) Clarifying perceptions/misperceptions 	3.4 3.5 3.2 2.9 2.2 2.8 2.3	2 1 3 4 7 5 6

From a managers point of view the improvement of services to clients is a major consideration, which (according to the responses) is probably shared by the field practitioners. Making training compulsory may be difficult to enforce onto serving staff members, while new entrants should hopefully only be accepted with sufficient/appropriate qualifications.

7. Best practices with regard to establishing and managing a professional Council

7.1 Reports by JIPSA and the SASAE

A desktop research report indicated the following:

- a) A Summary of relevant documents / articles related to Agricultural Extension Advisory Services and Professionalism by the Joint Initiative on Priority Skills Acquisition (JIPSA) 2009 (19 pages); and
- b) An article published in the SA Journal of Agricultural Extension in 2007 titled "Towards Professionalism in Agricultural Extension: The Professional Reputation of Extensionists in South Africa" by Dr S.E. Terblanché (23 pages).

The former reviews the Engineering, Planning, Nursing, Medical Accounting professions. The latter contains (amongst others) comparisons of The Town and Regional Profession, The Social Services Profession, The Association of Veterinary and Crop Associations of South Africa (AVCASA), The Veterinary Profession and The Natural Scientific Profession.

8. THE WAY FORWARD

With reference to the research study documents namely The Draft document (2011) and the Discussion document (2012) the following:

8.1 The "DAFF alone" route, namely to establish an own registration model for extension advisors in South Africa is not recommended because of the following reasons:

- a) The timeframe to establish an Act and to get the Act approved by Parliament and the appointed of an independent Council will take between two and three years.
- b) According to the Norms and Standards for Extension and Advisory Services in Agriculture every extension officer or advisor must be in position of a technical agricultural bachelor's degree and those who wish to be in the extension stream must have a higher degree in extension.
 - c) All technical agricultural qualifications are already being catered for by SACNASP in the Natural Scientific Profession Act, 2003 (Act27 of 2003). There is no reason at all to duplicate it under a new system or profession. It is believed that SACNASP could and will not approve such a duplication.
 - d) SACNASP now opened its registration levels to enable agricultural extensionist to register by accepting of a new (qualification) level B for Certificated Natural Scientists.
- 8.2 Registration of Extensionists (with SACNASP and the SASAE)
- 8.2.1 It is hereby recommended that every extensionist and advisor providing an extension or advisory service to farmers in South Africa should registered with SACNASP in one of the following categories (according to their qualifications in agriculture), namely:
 - i) Professional Natural Scientist;
 - ii) Candidate Natural Scientist;
 - iii) Certificated Natural Scientist Level A; or
 - iv) Certificated Natural Scientist Level B.

The reasons for registration with SACNASP are the following:

- a) SACNASP is functioning under the Natural Scientific Professions Act, 2003 (Act 27 of 2003);
- b) SACNASP is accepted as a body empowered to enforce an Act of Parliament;
- c) Registered Natural Scientists are bound to a "Code of ethics";
- d) A total of 4798 natural scientists are already registered by SACNASP of which 888 are agriculturists; and
- e) SACNASP and its administration activities are managed by committed staff members.
- 8.2.2 It is further recommended that every extensionist and advisor providing an extension or advisory service to farmers in South Africa should also registered with the SASAE (as a Voluntary Association

accredited with SACNASP) in one of the following current member categories, namely:

- a) Professional member;
- ii) Full member; or
- iii) Associate member

Or SASAE need to develop new categories as indicated in paragraph 5.1.2.

The reasons for registration with SASAE are:

- a) The Society understands the profession and is well networked with extension services throughout the country;
- b) The Society becomes aware of new developments and communicates such to its members mainly through the annual national conferences, but also through branch activities and newsletters;
- c) Professional growth is promoted through intellectual exposure;
- d) The Society offers co-ordination possibilities which include guidance and quality assurance;
- e) The Society assists in identifying Extension training needs; and
- f) The Society publishes an annual peer reviewed journal, the proceedings of its national conferences and a number of other extension related publications.

The SASAE is supportive to the functions of SACNASP.

- The Society would support SACNASP registration as a prerequisite for registration of its candidates.
- It might be necessary for SASAE to amend its own registration categories.
- SASAE would partner with other tertiary training institutions as well as extension advisory service providers to develop a credible system of Continuous Professional Development for registered members.
- Extensionists would carry a dual-registration i.e. firstly as Natural Scientist plus a supportive registration as Extensionists.