United Nations Educational, Scientific and Cultural Organization

UNESCO Chair in Social Learning and Sustainable Development

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Report on the CTA/WUR Inception Workshop on "Mainstreaming Tertiary Education in ACP ARD[1] Policy Processes: Increasing Food Supply and Reducing Hunger"

Education and Competence Studies, Wageningen , The Netherlands

November 01, 2012.

Background

The role of universities and other tertiary education institutions in socio-economic development is being reconceptualised. They are increasingly being called upon to move beyond training and the pursuit of knowledge. Governments especially in developed countries have implemented new funding mechanisms to support this thrust and facilitate innovation within the universities, so that they can expand their reach and increase their impact at community and national level. Developing countries need to do the same.

Several regional policy frameworks have been launched in the African, Caribbean and Pacific (ACP) Group of States to improve agricultural performance as well as the food and nutrition situation. At the continental level in Africa, the Comprehensive Agricultural Development Programme (CAADP) provides a framework for African countries to develop their national agricultural development policies and strategies and investment plans. CAADP focuses on four key pillars: (I) land and water management; (II) market access; (III) increasing food supply and reducing hunger and; (IV) agricultural research, extension service and Education. In the Caribbean, the Jagdeo Initiative for transforming Caribbean regional agriculture, the Caribbean Community Agricultural Policy and the Caribbean Regional Food and Nutrition Security Policy and Action Plan have been endorsed at the highest political level. The Pacific Plan was drawn up to guide the developments in the Pacific region.

Despite these laudable policies and their related action plans, many obstacles still need to be overcome to ensure their successful implementation at national and regional levels. Formulation as well as other stages in the policy cycle including implementation is often constrained by the lack of effective mechanisms for facilitating the engagement of various stakeholder groups. One such key stakeholder group which can be more effectively mobilized and engaged is tertiary agricultural education institutes.

The strategic role of agriculture in achieving food security, prosperity and economic growth in ACP countries remains of paramount importance. Despite this, the food insecurity picture remains particularly bleak especially in sub-Saharan Africa and hunger, under-nutrition and chronic food-related diseases e.g. diabetes remain a growing cause of concern for the ACP Group of States.

CTA and WUR in collaboration with ACP partner networks and organizations have chosen food security as the initial content domain to determine the extent of engagement of ACP tertiary education institutes in ARD policy processes. Food

[1] See the abbreviation list in Appendix 1

Security is one of the most pressing issues nationally, regionally and internationally and universities are currently looking for ways to (re)orient their education, research and community outreach towards addressing food security. Capacity development is seen as a key strategic intervention area and designing and piloting methodologies for learning lessons for enhancing the engagement of tertiary education institutes in ARD policy processes specifically CAADP and the major ARD policy instruments in the Caribbean and Pacific.

Main objective of the inception workshop at CTA Headquarters, The Netherlands September 18-21, 2012

"To generate consensus, understanding and commitment with respect to the methods for mainstreaming tertiary education in ACP ARD policy processes with a focus on Increasing Food Supply and Reducing Hunger."

Expected output

(i) An overview of the prior knowledge and experiences of the participant universities on food and nutrition security in order to arrive at a common understanding.

(ii) A commitment of TAE's and others partners for a follow-up on the ambitions, TOR's and methods for implementation.

(iii) A road map for implementing the quick-scan and the audit that are to take place at the selected universities.

Setting of the workshop

The inception workshop was attended by 20 participants: 16 representatives of 8 different universities (2 representatives per university of the following countries: Benin, Burkina Faso, Fiji, Kenya, Niger, Senegal, Tanzania, Trinidad &Tobago), and 4 representatives of pan-African networks: ANAFE, ECOWAS, RUFORUM, TEAM-Africa. All participants were senior lecturers within the field of food security (see Appendix 2 for the full list of the participants). CTA and WUR representatives also participated.

The workshop was divided in two main parts: The first two days were dedicated to presentations depicting the context within with universities in Africa, in the Caribbean's and in the Pacific should take up their role in the ACP ARD Policy Processes of "Increasing Food Supply and Reducing Hunger". Experts from CTA and Wageningen University on Food Security also provided input during the workshop to familiarize participants with the latest research, trends and frameworks around food security in non-Western contexts. The response of universities to these challenges was also presented by the representatives of the eight countries present at the workshop.
The second part consisted of interactive working sessions in groups in order to develop the instruments needed to further investigate, assess and monitor the changes that were agreed upon in the first part.

Achievements and Lessons learned

Part 1: Setting the context of Food Security in Africa and in the World, and the role of academic institutions within.

Several active networks shared their experiences, thoughts and best practices. These included: Implementation of CAADP process in West-Africa with support of universities of ECOWAP (ECOWAS), Improving the quality, relevance and application of agricultural education in Africa (ANAFE), Facilitating universities to foster innovation in education (RUFORUM) and Facilitating the overall CAADP process towards Education and capacity building (TEAM-Africa). Prof. Wals (UNESCO Chair of Social Learning and Sustainable Development, ECS-WUR) depicted the urgency for a 'role calibration', which is faced by the academic system, in Africa as well as in Europe, as a common concern of all universities in a rapidly changing world. Therefore, a parallel between the lessons learned from transitions in education in the Netherlands and the need for reforms in African educational institutions can be proven useful and enhance international collaboration for changes.

Prof Rabbinge (Emeritus University Professor Sustainable Development & Food security) presented the key factors responsible for the gap existing between the societal needs for (applied) local research of food security and the educational institutions in Africa. Based on IAC report, the main characteristics of African agriculture along with its entire value chain were discussed, and recommendations for a way forward presented.

This first part of the workshop ended with an overview of the response of the universities represented at the workshop. Each of the eight institutions presented the local context they are operating in, the structure of their agricultural education, food security situation in their countries and their vision and prospects for the future role of the university.

The key messages that can be extracted out of the first two days of the workshop are summarized below:

Networking/societal level:

- All TAE's do experience and recognize a structural gap between the societal needs and the reality of the market on one hand, and the profile of graduates and the services provided by the higher educational system on the other hand.

- There are already African driven resources in place to build up on (e.g. networks as ANAFE and RUFORUM and process facilitating organizations like TEAM-Africa). CTA also plays a lead role in connecting the networks and the universities within the ACP region and between the ACP and EU networks and experts. There is also a significant tank of best practices to be shared when it comes to developing interfaces between universities and the society. In the presentations of the TAE's represented at the workshop, several types of interfaces have been mentioned, like Hubs, Centers of Excellences, Incubators and ThinkTanks[2].

[2] For detailed information about these projects, please refer to the CTA website: http://knowledge.cta.int/Dossiers/CTA-and-S-T/Selected-events/CTA-WUR-Inception-Workshop-Mainstreaming-Tertiary-Education-in-ACP-ARD-Policy-Processes-Increasing-Food-Supply-and-Reducing-Hunger

Institutional level:
- All TAE's do see and recognize the urgency for changes so that they can fulfil a more relevant, leading role in Food security, create and retain a new generation of agricultural scientists.

- Many TAE's have already started seeking for solutions. However, although their response might be for a great part driven by specific local constrains, they recognize that they are still mainly acting as individual bodies. More sharing and international cooperation (especially West-East collaboration) is requested. They also need to formalize their efforts, by signing the CAADP COMPACT for instance.

Curriculum level:
- An integrative approach of education for impact-oriented research, education and training is necessary.
- There are already tools available for assessing and redesigning the curriculum (ex.: DACUM process[3])
- Curriculum change remains the purview of the universities.

After two days discussion, some <u>key questions</u> remained:

- What can we learn from knowledge institutions like: Think Tank, Hub, Centre of Excellence?
- Do we attract stakeholders or is it only a one-way communication tool for universities to disseminate publications?
- Does this enhance interdisciplinarity in education? Does this influence the Curriculum or Profile of students?
- How realistic / acceptable / possible is it to allow externals from outside of the university to (partly) participate to the definition of the (applied) research agenda of TAE's?

Part 2: Designing working instruments

➔ What is Food Security?

The third day of the workshop started with the unanimous agreement about the need for a common understanding of the concept of 'Food Security', as all participants declared. Instead of an agreement around a fixed, single definition of the concept, the participants decided to choose for a convergence of meaning toward a core understanding of food security, allowing flexibility in the framework, and meant to guide future work. During the presentations of day 1&2, several statements were distilled:

Food Security consists of 3 main aspects:

- Food Availability
- Food Accessibility
- Food Utilisation

[3] See presentation of S Chakeredza: ANAFE - Improving the Quality, Relevance and Application of Agricultural Education in Africa (Sept 2012) on the CTA web site

Some participants proposed the following definitions of terms:

- ✖ *Food security:* Is achieved when all people at all times have physical, social, psychological and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for a healthy and active productive and reproductive life.

- ✖ *Food security:* Households have adequate access to sufficient food to maintain an active and healthy life, without depending on humanitarian assistance. This implies adequate food available; that households have adequate resources to obtain sufficient food; and that they are healthy enough to receive the nutritional value of the food; that households are not under psychological pressure due a lack of food.

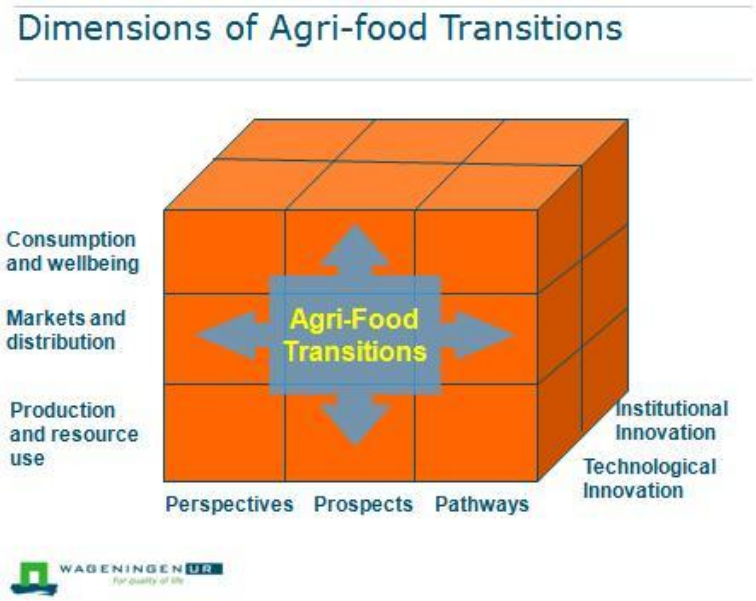
- ✖ *Food availability:* Physical existence of food, either from own production or from the markets. At national level, food availability is a combination of domestic food production, domestic food stocks, commercial food imports and food aid.
- ✖ *Food access:* Guaranteed when all households and individuals within households have sufficient resources to obtain appropriate foods for a nutritious diet, which depends on the level of households resources – capital, labour and knowledge , as well as prices.
- ✖ *Nutritional value:* Deals with adequate food of sufficient diversity to meet nutrient needs.

Food Security should also be understood to be a part of a technological production chain:

- Food security: having enough food
- Food safety: having safe food
- Food quality: having food of sufficient quality

➔ How to look at each specific working context?

One way to screen the context where in a given university operates is the ‘Agro-food Cube’.



This cube basically summarizes the efforts of the past two days of the participants to present and format information about the situation of their country with respect to food security (vertical axe), the type of process in which their university should operate (horizontal axe) and the domain where innovation eventually takes place in regard to these parameters (depth axe).
This cube was originally meant as a basis to design a quick scan instrument, so that institutions would be able to provide a comprehensive overview of their local situation to CAADP. The facilitators decided however to integrate this objective in the audit instrument in order to create one instrument that would address all requirements for the assessment, monitoring and evaluation of the CAADP process (audit instrument, see below).

➔ How to implement and monitor the CAADP process

Introducing the audit instrument

The *audit* should focus on the meso level seeking answers to questions such as: what is being done within the university to address increasing food supplies and reducing hunger? What portfolio of activities and provisions (including, policies, capacity development efforts, existing curricula with courses, modules, research programmes, community outreach, etc.) are already in place for responding to national and regional food and nutrition security goals?

ECS-WUR presented the AISHE tool (Auditing Instrument for Sustainability in Higher Education[4]), which has been tested, proven useful and has therefore being used for more than 10 years in the Netherlands and in Europe to assess and monitor the integration of sustainable development in higher education.

The AISHE instrument is primarily a self-assessment instrument designed to give a comprehensive overview of the situation of an educational program with respect to the sustainable development: how is sustainable development embedded in the curriculum, in the operations and in the institutions wherein the educational program is run? The methodology of AISHE consists in a semi-structured checklist of 20 criteria assessing 4 main categories: the Vision & Policy, The Expertise, the Education Goals

[4] See Appendix 3 for detailed information over AISHE

and Methods, and the Education Content (Curriculum). The assessment scale builds up in 5 integration phases: Activity-oriented, Process-oriented, System-oriented, Chain-oriented and Society-oriented. See also Appendix 3 for detailed information.

As AISHE was intended to assess and monitor the integration of sustainable development, it needs to be adjusted to the scope (Food Security) and needs of the project. The working session was therefore oriented in determining whether adaptations of AISHE for the transition in education needed in the CAADP-process were possible without compromising the generic methodology o the instrument, and whether AISHE could been matched with the requirements of all participants.

After playing the part of being audited, in order to get acquainted with the application of the AISHE-instrument, the group of participants was divided in 4 working groups: Burkina Faso/Benin, Senegal/Niger, Tanzania/Kenya and Trinidad & Tobago/Fiji. Each group is assigned to one of the four main category and will have the responsibility to review the description of the criteria of this category in order to align it to the focus of food security (see Key Decisions below).

Key decisions for following up

By the end of the third day session of the workshop, the following agreements were made:

- There is a strong need for a virtual platform where sharing can take place. CTA will provide a space to the pilot participants.
- The participants accept the proposal of using AISHE as a first milestone toward a CAADP monitoring instrument for transitions in agricultural education. They got both the actual AISHE manual in English (no French version available yet) and the AISHE reporter program used to generate a visual mapping of the outcomes of the audit.
- RUFORUM, ANAFE and TEAM-Africa committed to coordinating and overseeing the CAADP-process in specific universities/countries.
- The 4 working groups committed themselves to review the descriptions of the AISHE-phase for the criteria so that they will meet the focus on Food Security above Sustainable Development. Each group is assigned to one of the 4 main categories. The assignment reads:

  Tanzania/Kenya = Vision&Policy

  Senegal/Niger = Expertise

  Trinidad&Tobago/Fiji = Education Targets and Methodology

  Burkina Faso/Benin = Education Content

  - The reviewed categories will be sent per email to olivier.bello@wur.nl for processing before the 15th of November 2012. The AISHE book will be adapted as well as the AISHE reporter program. The final version of the Audit instrument should also be translated in French (CTA)
  - Audits will take place between January-March 2013 (2 days / audit, to be held at all 8 universities). See timetables here below.

- The audit will be led by Olivier Bello (ECS-WUR) (with the participation of Prof. Arjen Wals when possible).
- Guidelines for the organization of the audit: the audit requires the presence of the department director, from 3 up to 15 lecturers, and from 3 up to 8 students, depicting together a representative overview of the curriculum. Further alignment, fine-tuning and instructions will be provided after previous consultation between ECS-WUR and each of the universities concerned by the pilot.

Timetable (concept)

Design step: October-December 2012: adaptation of the AISHE instrument with use of review and suggestions of the workshop groups

Testing: suggestions for the audits to be hold at the pilot universities

Tanzania/Kenya = First week January 2013

Senegal/Niger and Burkiba Faso/Benin = Mid January 2013

Trinidad&Tobago/Fiji = Late January 2013

Evaluation and Fine-tuning of the audit instrument and quick scan: February –April ‘13

Follow-up for Implementation of the results of the audits: February – June ‘13

Evaluation of the pilot 2012-2013: September ’13

Appendix 1: Abbreviation list

@@ **TO BE ADDED**

Appendix 2: Participants list

No.	Title	Surname	First name	Gender	Nationality	Function	Organisation	Country
1	Dr	Achigan Dako	Gbenato Enoch	M	Benin	Lecturer Department of Plant Production Faculty of Agronomic Sciences	University of Abomey-Calavi	Republic of Benin
2	Mr	Aubee	Ernest Reuben	M	Gambian	Principal Programme Officer-Agriculture	ECOWAS	Nigeria
3	Prof.	Balla	Abdourahamane	M	Niger	Coordonnateur du CRESA Faculté d'Agronomie	Université Abdou Moumouni	Niger
4	Dr	Bett	Eric K.	M	Kenyan	Lecturer Department of Agribusiness Management & Trade School of Agriculture & Enterprise Development (SAED)	Kenyatta University	Kenya
5	Prof.	Boly	Hamidou	M	Burkinabe	Coordinator	TEAM -Africa	Uganda
6	Dr	Chakeredza	Sebastian	M	Zimbabwean	Network Manager	ANAFE C/O World Agroforestry Centre	Kenya

7	Prof.	Dicko	Mamadou Hama	M	Burkinabe	Head of the Laboratory of Food Biochemistry, Enzymology, Industrial Biotechnology and Bioinformatics	University of Ouagadougou	Burkina Faso
8	Dr	Ekaya	Wellington	M	Kenyan	Training & Quality Assurance Manager	RUFORUM	Uganda
9	Dr	Elhadji Gounga	Mahamadou	M	Niger	Faculté d'Agronomie et des Sciences de l'Environnement	Université de Maradi	Niger
10	Dr	Fogny	Nadia Fanou			Lecturer Department of Food & Nutrition Faculty of Agronomic Sciences	University of Abomey-Calavi	Republic of Benin
11	Dr	Gueye	Tala	M	Senegalese	Directeur de la Recherche	l'Université de Thiès	Senegal
12	Dr	Kaaya	Abel Kivelia	M	Tanzanian	Deputy Dean Faculty of Agriculture	Sokoine University of Agriculture	Tanzania
13	Prof.	Kinabo	Joyce	F	Tanzanian	Lecturer	Sokoine University of Agriculture	Tanzania
14	Dr	Lako	Jimaima Veisikiaki	F		Senior Lecturer Food Science School of Biological and Chemical Science Faculty of Science, Technology and Environment	University of the South Pacific (USP)	Fiji
15	Dr	Ndiaye	Saliou	M	Senegalese	Ingénieur agronome Directeur des Etudes de l'ENSA	Université de Thiès	Senegalese

16	Dr	Nyairo	Newton M.	M	Kenyan	Lecturer Department of Agribusiness Management & Trade School of Agriculture & Enterprise Development (SAED)	Kenyatta University	Kenya
17	Dr	Patterson-Andrews	Hazel	F	Trinidad & Tobago	Department of Agricultural Economics and Extension	University of West Indies (UWI)	Trinidad & Tobago
18	Dr	Pousga	Salimata	F	Burkinabe	Animal Scientist	Université Polytechnique de Bobo Dioulasso	Burkina Faso
19	Prof.	Rekhi	Harjit Singh		Canadian	Department of Food Production	University of West Indies (UWI)	Trinidad & Tobago
20	Dr	Rohindra	David	M	Fijian	Senior lecturer in Chemistry School of Biological and Chemical Sciences Faculty of Science, Technology and Environment	University of the South Pacific (USP)	Fiji

Appendix 3: AISHE instrument in a nutshell

AISHE has been developed as a Dutch response to several declarations and charters on Education for Sustainable Development (ESD) expressed around an d after Rio conference in 1992. It is originally derivates from existing models for quality management and for environmental management, like the ISO 9000 and 14000 series, EFQM (developed by the European Foundation for Quality Management), BS 7750, EMAS. In 2008-2011 it has been reviewed by an international team (University of Graz, Austria, Mälardalen University in Sweden, University of Santiago de Compostela in Spain).

AISHE is not a normative instrument. It aims to provide a well-structured model for education development and innovation, with possible fine-tuning for a specific local context. It makes also achievements comparable in time (monitoring) and in space (emulation between universities).

AISHE consists in a list of 20 criteria (see Figure 1) designed to assess the level of embedding of the concept ‘sustainable development’ in a given educational program. The assessment uses a five-point ordinal scale that is explicitly defined for each of the 20 criteria, thus resulting in an array of 5 × 20 descriptions (see Table 1).

Figure 1: the 20 criteria of AISHE

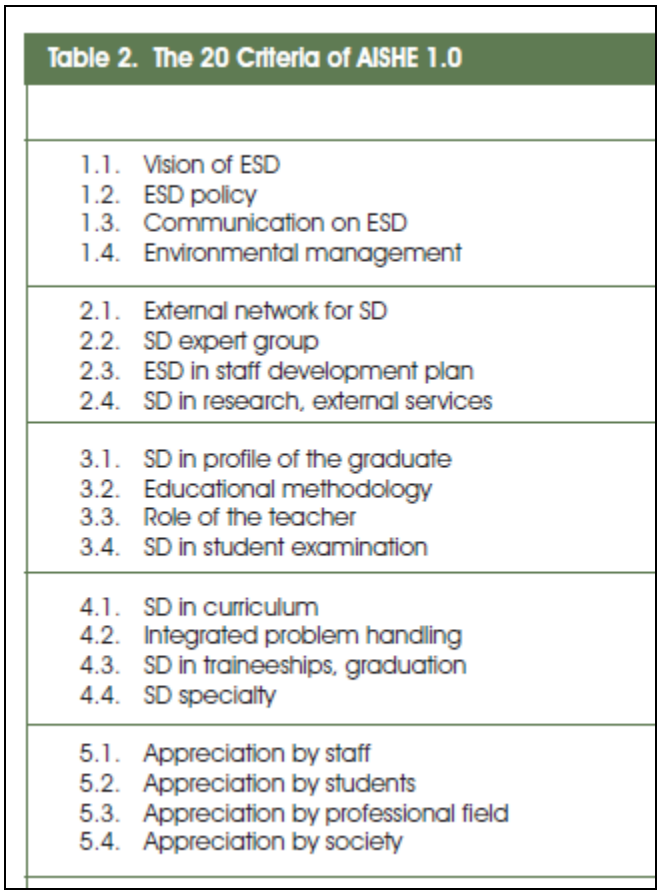


Table 2. The 20 Criteria of AISHE 1.0
1.1. Vision of ESD 1.2. ESD policy 1.3. Communication on ESD 1.4. Environmental management
2.1. External network for SD 2.2. SD expert group 2.3. ESD in staff development plan 2.4. SD in research, external services
3.1. SD in profile of the graduate 3.2. Educational methodology 3.3. Role of the teacher 3.4. SD in student examination
4.1. SD in curriculum 4.2. Integrated problem handling 4.3. SD in traineeships, graduation 4.4. SD specialty
5.1. Appreciation by staff 5.2. Appreciation by students 5.3. Appreciation by professional field 5.4. Appreciation by society

How to carry on an AISHE audit

AISHE is designed to be used in combination with a participative approach. Fir the audit, a group of managers, lecturers and students (with eventually some external stakeholders) representing a given educational program, is required. The group discusses plenary each of the descriptions related to a criterion, starting from criterion 1.1 to 5.4. One can choose to assign a president to facilitate the process of debating, or ask for a certified auditor (delivered by the ECS group of the Wageningen University).

When the group agrees upon a consensus about this criterion, a score is given from 1 (stage 1) to 5 (stage 5), depending on the level of embedding decided by the group.

Table 1: General description of the 5-point ordinal scale of AISHE

Stage 1: **Activity** oriented	*Stage* 2: **Process** oriented	*Stage* 3: **System** oriented	*Stage* 4: **Chain** oriented	*Stage* 5: **Society** oriented
- Educational goals are subject oriented. - The processes are based on actions of individual members of the staff. Decisions are usually made ad hoc.	- Educational goals are related to the educational process as a whole. - Decisions are made by groups of professionals.	- The goals are student oriented instead of teacher oriented. - There is an organisation policy related to (middle)long-term goals. - Goals are formulated explicitly, are	- The educational process is seen as part of a chain. - There is a network of contacts with secondary education and with the companies in which the graduates will find their jobs. - The curriculum is	- There is a long-term strategy. The policy is aiming at constant improvement. - Contacts are maintained, not only with direct customers but also with other stakeholders.

		measured and evaluated. There is feedback from the results.	based on formulated qualifications of professionals.	- The organisation fulfils a prominent role in society.

A computer application goes along with the AISHE instrument: 'AISHE Reporter' (see Figure 2). The program is used during the audit, and it forces a clear report structure. It also enables the participants to the audit to view the results of their assessment immediately after completion, and to export the results to a word processing application, a spreadsheet, a graphical or a presentation program.

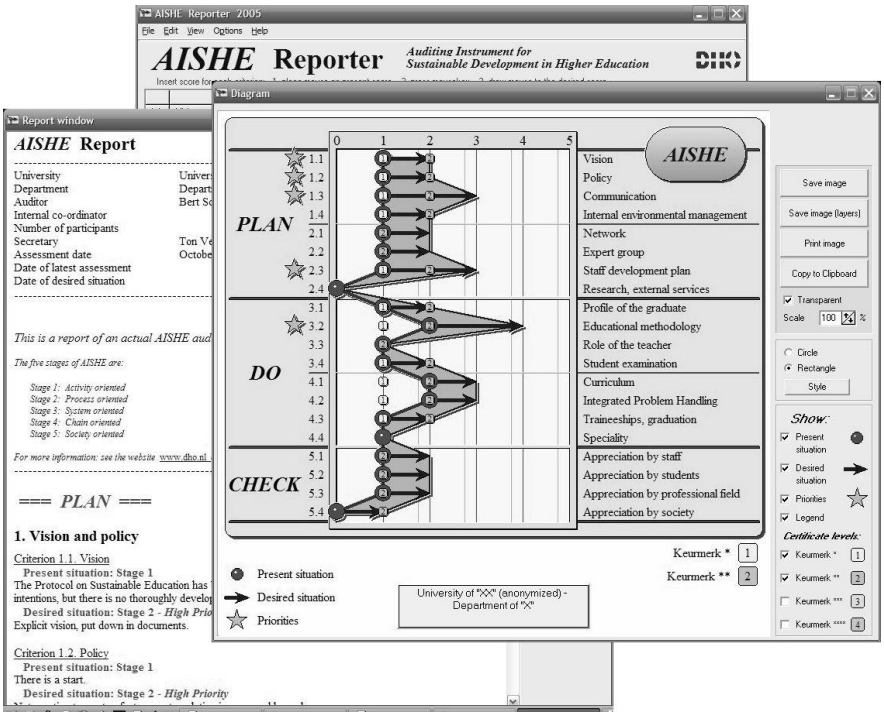


Figure 2: AISHE Reporter

During the discussion of the criteria, naturally a number of possible improvement points will rise. This will enable the group – for each criterion – to formulate a *desired situation* that will start from the actual situation for that criterion previously decided by the group. This desired situation is defined, not only in the form of a stage to be reached, but also in the form of a series of concrete targets and associating activities that will lead to the desired stage.

In order to guarantee that the necessary concreteness is really achieved, at the beginning of the consensus meeting a decision is made about the (future) policy period the desired situation is related to. This may for instance be a period of one year, starting at the moment of the assessment.

The results of an AISHE audit are:

• A description of the present situation, in the form of a number (the stage) for each criterion plus a description for each criterion in words;

• A ditto description of the desired situation;

• A date in which this desired situation has to be reached;

• A list of first priorities that are considered to be crucial in order to be permitted to conclude that the policy will have been successful.

In the end, this package has the status of “recommendations to the management”.

It is rather likely that this set of recommendations has a good chance of being accepted and to become a part of concrete policy plan. This is because the management itself is represented in the group of participants (and that is exactly why that is so vital!); and the recommendations have – if all went well – been chosen in consensus by a representative group from the staff and the students, so it is likely that there is support for the conclusions.

For an assessment in which all 20 criteria are investigated, the consensus meeting(s) will probably take 4 to 6 hours.