

FAO PSMS and Results Based Monitoring and Evaluation Training Johannesburg, South Africa 14-25 November 2011

The Pesticide Stock Management System (PSMS) has been enhanced to incorporate a mechanism that allows countries to share information about their registered pesticide. This enhancement will assist them in selecting the most appropriate pesticides to register and to deregister less effective and harmful pesticides. Fourteen government professionals from Botswana, Kenya, Malawi, Mozambique, Swaziland and Fiji were trained in the use of PSMS, in particular the new registration module, and the FAO M&E system to track progress on the implementation of country work plans. The training was organized from 14 to 25 November at the University of The Witwatersrand, Johannesburg, South Africa.



FAO PSMS and Results Based Monitoring and Evaluation Training, Johannesburg, 14-25 November 2011

Aims of Workshop:

- To train the national teams using and applying the different PSMS components;
- Present the new PSMS tool for pesticides registration for testing and review by the participants; consolidate the feedbacks gained during the workshop;
- Understand the current needs and interest of the countries for a web-based pesticides stock management system;
- Train the countries as part of a regional workshop and offer the participants the possibility to share ideas and problems and for FAO to promote a regional or multilateral approach of pesticides registration;
- Understand the national capacities for implementing PSMS and any requirement of further support;
- Develop a comprehensive training kit on PSMS with presentations, exercises, video support, assessment and evaluation.

Issues, outcome and recommendations:

- The training allowed country teams to be trained in the following PSMS components: Pesticides registry, Inventory data entry, Pesticides import and movement. They also received a demonstration on the Reports and the Safeguarding PSMS tools (see Annex 2 Agenda). In addition to the skills on the use of PSMS gained during the training, the participants are now more likely to plan the implementation of PSMS in their countries. This includes defining the scope (which tool, to which sector); which Ministry will host and manage PSMS; technical and training needs; period; etc. As part of his Term of References, the RC will provide some remote follow-up with country teams to ensure system is deployed and used.
- An exam at the end of the PSMS 4 days training allowed for assessment of the participants' capacities. Ten participants were awarded certificates of competence and four with certificates of attendance. At least one participant for each represented countries received a certificate of competence (see Annex 1).
- A number of opportunities for enhancement and improvement were identified, listed and sent to the system developers in CIOK for action (see Annex 3). Botswana would find it useful to use the PSMS registry tool as the main/unique source of information regarding the national pesticide registry. They have requested that PSMS provides a publicly accessible interface for the pesticide registry.



- The course was well received and the evaluation of the training demonstrates a general satisfaction regarding the usefulness of the course, the facilities and the way the training was conducted (see Annex 5). Although 60% of the training was practical use of the system, the participants identified that they would require significantly more practice in order to become competent. It is recommended that a user forum with training tools is established to allow trainees to continue to practice after the training has completed.
- Participants used real inventory data from Swaziland and Botswana to practice the data entry component of PSMS. The time available allowed uploading only a part of the inventory data of both countries. Thus, this data couldn't be used to practice the data validation, the reporting functionalities (e.g. visualisation with Google map), the stores prioritization and the selection of a collection centre. It would be very useful for future training to have training material in the PSMS Training platform ready to be used for exercises on each major step of PSMS components and that can be re-initialised at the end of the training.

Annex 1: List of participants

FAO Sub-regional training on M&E and PSMS as a registration tool List of Participants

Country	Name	Email	Certificate	Rank
Botswana	Loitseng Sebetwane	lsebetwane@gov.bw	Certificate of competence	6 (70.4%)
Botswana	Collen Mbereki	cmbereki@gov.bw	Certificate of competence	4 (74.6%)
Kenya	Mr. Maurice Barasa Wanyonyi	bmwanyonyi@yahoo.com	Certificate of competence	3 (80.0%)
Kenya	Ms. Mercy Alusa Ingosi	mercyabner@gmail.com	Certificate of competence	2 (82.1%)
Kenya	Mr. Stephen Gichira Mathia	stephenmathia@hotmail.com	Certificate of competence	7 (67.1%)
Malawi	Rodrick Ndawala	pesticideboard@malawi.net	Certificate of competence	8 (65.8%)
Malawi	Tonny Harris Maulana	pesticideboard@malawi.net	Certificate of attendance	10 (50.0%)
Mozambique	Samson Cuamba	samsoncuamba@yahoo.com.br	Certificate of attendance	11 (37.5%)
Mozambique	Khalid Cassam	khalidcassam@yahoo.com.br	Certificate of competence	1 (91.7%)
Swaziland	Mr. Boniface Makhubu	makhubub@gov.sz	Certificate of attendance	10 (50.0%)
Swaziland	Similo Mavimbela	seemelo@yahoo.com	Certificate of competence	5 (72.1%)
Vietnam	Mr. Do Van Hoe	hoe_dovan@yahoo.com	Certificate of attendance	12 (20.0%)
Vietnam	Ms. Luong Hai Yen	yenbvtv@yahoo.com	Certificate of competence	9 (60.8%)
Fiji	Fereti Atumurirava	FeretiA@spc.int	Certificate of competence	7 (67.1%)



Annex 2: Agenda of the workshop

PSMS Training Workshop in South-Africa November 2011 Agenda of the PSMS component

Date	Activities	Who
Pre-course	Homework: <ul style="list-style-type: none"> • Complete import template of registered pesticides. To be sent to FAO by 1st November. • Nominate PSMS users with the following restricted rights: <ul style="list-style-type: none"> ○ Modifying pesticide registration information ○ Viewing pesticide registration information ○ Data entry of inventory information of pesticide stocks ○ Validation of inventory information of pesticide stocks • Bring <ul style="list-style-type: none"> ○ Inventory data of your country <ul style="list-style-type: none"> ▪ Copies of PSMS Inventory forms ▪ USB flash drives with photographs of sites, stores and pesticides, movie records, etc. ○ Copy of the pesticides register of your country 	Participants
Monday 14 th	Pesticide Stock Management System (PSMS) overview Administration and setting up users Pesticide registration <ul style="list-style-type: none"> • Registration users • Country set-up (sharing information) • Entering pesticide registration data • Modifying pesticide data • Banned and restricted uses 	Richard Thompson Ivy Saunyama Steven Byrde Richard Thompson
Tuesday 15 th	Inventory data entry Searching data in PSMS	Ivy Saunyama Steven Byrde
Wednesday 16 th	Data entry continued Stock management of usable pesticides: <ul style="list-style-type: none"> • Import • Quality control • Movement • Use • End of life 	Ivy Saunyama Steven Byrde Richard Thompson
Thursday 17 th (am)	Inventory validation Reporting (Excel functions) Safeguarding strategy development <ul style="list-style-type: none"> • Prioritization of stores and regions Selection of collection centres	Ivy Saunyama Steven Byrde
Saturday 21 st	Recap; Exam; Evaluation	Ivy Saunyama Steven Byrde



Annex 3: PSMS Bugs and Improvement needs identified during the training

PSMS Improvements identified in South Africa and Izmir Trainings

#	Issue	Change to be made	Who	Priority
1.	PSMS slow and run time errors occurred	Migrate both Live and Training sites to a dedicated server, large and fast enough to cope with increased traffic	Kiran	H
2.	Registration details should include information on container (Mozambique registrar)	Add a new one-to-many wizard to allow multiple container details to be added to a registration. Each container details should include: <ul style="list-style-type: none"> • Container type (from current reference table) with option for "other" • Container size • Container size units (from current reference table) • Container material (from current reference table) <ul style="list-style-type: none"> ○ For Plastic there should be a second drop down of : <ul style="list-style-type: none"> ▪ LDPE ▪ co-extruded laminates ▪ PP ▪ PET ▪ PES ▪ Metalized film ▪ etc 	Jan – the list of plastic materials	H
			Salvatore – the wizard (see below the need for duplicate button)	H
3.	Growth regulators are not included in the AI reference table	Compile list of growth regulators (insect and plant)	Jan Breithaupt	M
		Add growth regulator chemicals to the AI dropdown list	Salvatore Contu	M
4.	Tedious re-keying similar usage details and container details	Add "create duplicate" button on all wizards, to create a new usage details and container details that can be edited. There should be a verification in the "save" routine that checks that the details are not duplicated.	Salvatore	VH (For usage) When possible for containers
5.	Make each user types autonomous – currently all registrars need also to be registry viewer	<ul style="list-style-type: none"> • National Registrar should be able to view, create edit and change all statuses of their national register and upload registration template. National registrar should set the sharing rules for the country • Regional Registrar should be able to view, create edit and change all statuses of their regional register and upload registration template. Regional registrar should set the sharing rules for the regional registry info. • National Register Data – should be able create and edit national registry records with status "incomplete" • Regional Register Data – should be able create and edit regional registry records with status "incomplete" • Registry viewer should just be able to view their national registry All the above should be able to view any applicable regional register to which their nation belongs and any national register of a country which elects to share its register.	•	•



#	Issue	Change to be made	Who	Priority
6.	New user types	Customs officer: associated to an entry point and with the capacity to clear an import for shipment to the first store. Multiple customs officers can be associated to a single entry point. Import Request Authoriser: can approve requests for import	Salvatore	
7.	Multiple users	Can be more than one registrar and registry entry user in each country / region		
8.	Dosage units in usage wizard do not cover biocides, seed dressing, animal health etc	Dosage units should include: g/kg ml/kg ml/l g/kg body weight ml/kg body weight	Salvatore	H
9.	Errors in entering data fields	As well as direct entry, All date fields should also have a calendar box to select the date	Salvatore	M
10.	Inventory – site and store information – “not restricted”	All fields about weight, width and height limits as well as the numeric answer need a check box for “unrestricted” where there are no limits	Salvatore	M
11.	Risk analysis: Is there a roof – No; Next question Is roof leaking – Yes	Make the following combination produce and error: Is there a roof – No; Is roof leaking – Yes	Salvatore	M
12.	PSMS works well with IE7 and Firefox but there are problems with IE8 and IE9	Test all upgrades with all current versions of common browsers. Google chrome Firefox I.E 7-the latest version	Salvatore	Every upgrade
		When new IE versions are released – undertake a test of all PSMS functions	Grazia Chiu	When necessary
13.	There is a problem in interpretation of Question 14 about hazard labels	Change: “unknown” to “no labels” and “none” to “no hazard symbols on label”.	Salvatore	M
14.	Tick boxes on pesticide paper form often incorrectly completed	Change the layout of the yes and no check-boxes at the top of paper form. Each box should be to the right of its corresponding field name (“yes” and “No”) – modify in all languages	Grazia	Before the next print run
		Upload the new pdf file to the resources page -	Salvatore	When PDFs are available
15.	Countries want Import permit numbers to follow their national standards	Allow the following options: 1. Allow countries to manually enter import permit numbers for each import authorization 2. In some countries each consignment requires a separate authorization – i.e. the authorizer should specify whether multiple call-offs are allowed	Salvatore	M
16.	Import permits often are charged for – countries requested PSMS to manage the fees and revenue	Investigation needs to be made how this could be organized	Discussion: Mohamed, Kiran, Richard	L
17.	Countries want to be able to query and generate reports on imports approvals and actual arrivals, usage, over a period of time.	Report on the implications and costs of providing reports of this information	Kiran/Salvatore	
18.	Some countries do not have their respective geopolitical areas uploaded.	Upload all Geopolitical areas for each country	Salvatore	L



#	Issue	Change to be made	Who	Priority
19.	Countries would like PSMS to record the user names and dates when key changes were made: Import approval Registration, de-registrations, etc	Report on the implications and costs of recording this information	Kiran/Salvatore	M
20.	Import request should include a field where the requester records the justification for the import	Add text field for the import justification	Salvatore	M
21.	Import request does not require the "how supplied" field	Remove the "how supplied" field	Salvatore	M
22.	Import request: The batch no. and expiry dates are not known at the time the request is made	Remove batch no. and expiry dates from the import request. Insert them in the consignment details	Salvatore	M
23.	Warning required for registering Rotterdam or Stockholm restricted pesticides	A warning should appear to the registrar when they attempt to register a listed, restricted, or banned a.i. under any of the chemical conventions	Jan Breithaupt to provide list and warning messages Salvatore to implement	M
24.	Email alerts are not functioning	Investigate and set up email alerts	Salvatore	L
25.	Regulators would like to provide a license number for stores	In the country set up – should be an option that turns on store licensing – when turned on, the store form, as part of the validation process, should be given a licence number	Salvatore	L

General issue for discussion within the team - Concerns expressed that the bar codes work with a small number of 200 litre drums, but would be very difficult for large batches of small pack sizes e.g. 10,000 x 100ml



Annex 4: Exam questions with maximum mark, average participants' mark for each question and PSMS component related to the question

The averages marks represents the mean of the mark of all participants for this particular question. The average is indicated in red when average is below 60% of the maximum. This can assist in better designing, preparing or delivering the training of this particular PSMS component, in better allocating the training time (including exercises) between each PSMS component or simply in better formulating the exam question.

Questions:		Mark	Average	PSMS component
1	What must you do if you forget your password for PSMS?	1	0.84	PSMS usernames/general
2	Describe the role of Administrator (tasks, rights)	3	2.07	PSMS usernames/general
3	Describe at least 5 uses of PSMS	3	2.32	PSMS usernames/general
4	What are the colour codes for: Stores; Risk analysis; Materials	1.5	1.05	Data entry (inventory)
5	What are the two methods for entering pesticide registrations?	2	1.71	Registration
6	Imagine you have been asked to amend a data entry form. Describe two ways you would find it	1	0.52	Data entry (inventory)
7	Why is it important to have the pesticides register on the system?	2	1.20	Registration
8	What is the difference between 'mandatory' and 'necessary/required' fields?	2	0.75	Data entry (inventory)
9	Here are the 9 components for the import of pesticides. Arrange them in the right process order	4.5	3.21	Data entry (Import)
10	You are entering a pesticide form in PSMS with 57 identical containers of this pesticide. On the back of the form, a note indicates that there are 50 containers 100% full, 5 containers 75% full and 2 containers 25% full. How can you capture this information in PSMS? Describe the procedure. (3)	3	1.71	Data entry (inventory)
11	Tick the information that is important for the prioritisation and which for the safeguarding	3	1.89	Safeguarding/Report
12	What are the advantages and disadvantages of PSMS being a web based tool?	4	3.00	PSMS usernames/general
13	What are the 7 statuses in the PSMS work-flow for data-entry and validation and draw the icon (symbol) for each. Please put them in the order in which they occur in the workflow.	10	7.29	Data entry (inventory)
14	What would you check before making a store available for validation? How would you pass it for validation?	2	0.98	Data entry (inventory)
15	How can you tell if your changes to PSMS data have been saved?	1	0.25	Data entry (inventory)
16	Describe four causes for them not being saved	2	0.75	Data entry (inventory)
17	If the programme gets stuck, what should you do?	1	0.43	Data entry (inventory)
18	If you have multiple active ingredients, what should you do?	2	1.61	Data entry (inventory)
19	A pesticide form states that the product is in a paper bottle. What would you do? (1)	1	0.41	Data entry (inventory)
20	A bottle of Stomp is described on the inventory as 50% w/v. You see that the label says it is 500g/l. Is the inventory correct? (1)	1	0.64	Data entry (inventory)
21	Describe the steps necessary to prepare a photograph of a general view of a store for uploading to PSMS and number them in the order you would do them	2	1.52	Data entry (inventory)
22	How does the preparation of label photographs differ from the above? (1)	1	0.54	Data entry (inventory)
23	Where can you find "Resources" and what can you find in when you open it?	2	0.46	PSMS usernames/general



24	What status must the store have before it can be included in the prioritisation?	1	0.34	<i>Safeguarding/Report</i>
25	What do you understand by 'Fp' and 'Fe'?	2	1.43	<i>Safeguarding/Report</i>
26	Which criteria would you use to determine whether a pesticide was usable, obsolete or required testing? (2)	2	1.18	<i>Data entry (inventory)</i>
	Total	60	38.11	
	Average		63.5%	



Annex 5: Evaluation of the PSMS training by the participants

Question No.	Evaluation Questions	Score (1-5; 0 if no answer)	Average	Question Related to		
				Subject	Trainers	Facilities
1	New knowledge relevant to your work?	5 5 5 5 5 5 4 4 4 5 - 5 5 4 5	4.71	4.71		
2	Did the course meet your needs?	4 4 5 4 5 5 4 4 5 4 5 5 5 3 5	4.47	4.47		
3	Will this course be of value to your organisation?	4 5 5 5 5 5 4 4 5 5 5 5 5 4 4	4.67	4.67		
4	How was the ratio of lecture to active learning?	3 4 4 4 5 4 3 3 3 4 4 4 4 3 5	3.80		3.80	
5	How do you rate the teas, meals, accommodation?	5 5 5 5 5 5 4 4 3 1 5 4 4 4 2	4.07			4.07
6	How do you rate the training room facilities?	5 4 5 5 5 5 4 5 4 4 4 5 5 4 5	4.60			4.60
7	Did the facilitators respond well to questions and information from the group?	4 4 5 5 5 5 4 4 4 4 5 4 4 3 4	4.27		4.27	
8	Did the facilitators use variety and keep sessions interesting and lively?	5 5 5 4 5 5 4 3 2 4 4 5 5 3 5	4.27		4.27	
9	Did the facilitators use training aids effectively?	5 5 5 4 5 5 4 4 3 4 5 5 5 4 5	4.53		4.53	
10	Did the facilitators stimulate interest in the subject?	5 4 5 4 5 5 3 3 2 5 4 4 4 3 4	4.00		4.00	
11	What was your overall rating of the facilitators?	4 4 5 4 5 5 4 3 3 4 5 5 5 3 5	4.27		4.27	
12	What was your overall rating of the course?	5 5 5 4 5 5 4 4 4 5 5 4 4 3 5	4.47	4.47		
13	Would you recommend this course to others?	5 5 5 5 5 5 4 4 5 5 4 4 4 5 5	4.67	4.67		
14	Would you pursue further training based on what you have learned during this course?	4 3 5 4 5 5 4 4 5 4 5 5 5 5 5	4.53	4.53		
15	In what ways do you think the course could be improved? Write suggestions and comments below and on reverse.	See below				
				4.38	4.59	4.19 4.33

Suggestion, remark:

More time and using real data. Complete one full process & Store and complete all process
 Require more practical (hand-on) work or practice using the computer!
 Maybe apply multi-choice test, because in short time it is difficult to remember all tools and process
 It's okay
 Training material distributed before training commences
 It is a nice tool but needs more practical work
 More time for hands on use of the PSMS is required



More time needed to grasp concepts; Hands experience needed for trainees in countries already using PSMS
Having follow up session: e.g. blog-discussion during actual application in countries
1) Should be systematic and chronological; 2) enough time should be allocated for the subject matter contents
More time should be allocated on practices