Regional Workshop on

Evaluation of the Farmer Field School (FFS) for Anchoring Sustainable Integrated Pest Management By Small Farm Holders in the NENA Region

Jordan





Organisation des Nations Unies pour l'alimentation et l'agriculture





FAO regional IPM

Number and type of FFS implemented in Jordan

	No. of		Cultivation
Location	FFS	Сгор	Method
Al Safi	63	Tomatoes	Open field
Al Safi	5	Watermelon	Open field
DairAlla	23	Tomatoes	Open field
DairAlla	17	Tomatoes	Plastic house
DairAlla	15	Cucumber	Plastic house
South Shuna	6	Tomatoes	Open Field
South Shuna	5	Cucumber	Plastic house
North Shuna	9	Tomatoes	Open field
North Shuna	3	Cucumber	Plastic house
Highlands	7	Cucumber	Plastic house
Total number of FES	153		

Total number of FFS153







FAO regional IPM

Number and topics of technical workshops and trainings conducted with MOA/NCARE staff

Topics Description	Year	Males	Females
IPM of Tomato Crops	2005	17	3
IPM of Cucumber Crops	2005	15	5
ToT in Sanitary and Phytosanitary (3 times)	2006	41	22
ToT Workshop on FFS/IPM (National)	2007	16	4
Season-long Training (Jordan Valley)	2007	17	3
ToT Workshop on FFS/IPM (National)	2007	18	2
Season-long Training (South Ghour)	2007	18	2
Pest Risk Reduction	2007	15	5
Biological Control and Natural Enemies	2007	17	3
IPM	2007	17	3
ToT Workshop on FFS/IPM (National)	2008	16	4
ToT Workshop on FFS/IPM (National)	2009	15	5
ToT On Harvest, Post Harvest and Storage	2009	15	5
ToT on Quality Standards Main Vegetables	2009	16	4
Plant Pollination	2010	17	3
ToT Workshop on FFS/IPM	2010	20	4
Season-long Training (South Ghor and Jordan Valley - 3			
times)	2012	31	9
Total number of participants		321	86
% of male and female participants		79%	21%

FAO regional IPM

Number and percentage of men and women participants in FFS

Season	No. of FFS	No. of Male Farmers	%	No. of Female Farmers	%	Total Farme rs
2004/2005	7	73	78	20	22	93
2005/2006	24	269	83	56	17	325
2006/2007	22	248	80	61	20	309
2007/2008	25	308	81	71	19	379
2008/2009	25	316	80	79	20	395
2009/2010	25	283	78	78	22	361
2010/2011	25	327	82	71	18	398
	153	1824	80%	436	20%	2260

FAO regional IPM/TCP-TUTA

Year	Number of FFS	Trained farmers	Area
2010	11	138	Safi Area
	6	85	Jordan Valley
2011	9	120	Safi Area
	3	40	Jordan valley
2012	5	67	Safi Area
	2	28	Jordan valley
	1	12	Mafraq
2013/2015 TCP tuta	8	120	Jordan valley
	4	50	Highland
Total	49	660	

FAO regional IPM/TCP-TUTA

Trap distribution

Year	Area	Number of traps		
		Monitoring	Mass trapping	
2010	Jordan Valley	650	200	
	Safi Area	2200	1500	
	Mafraq	150	400	
2011	Jordan Valley	400	1500	
	Safi Area	700	4500	
	Mafraq	50	170	
2012	Jordan Valley	1500	2200	
	Safi Area	1250	3000	
Total		6900	13470	

Solanum elaeagnifolium Farmer Field Schools

FFS were established, during the period 25 March to 3 April 2013, in the following regions: **South Shouneh, North Jordan Valley, Mahes & Al Fehaies, Dair Alla, Madaba, and Irbid** (around 60 farmers).



□ From 2004-2010, the IPM programme in Jordan primarily focused on development of smallholder farmers on IPM technologies that aimed to reduce the use of chemicals in their food production systems; and improve the management of agro-eco systems, with a focus on pesticide risk on health and the environment. Later in 2010-2014, the programme focused on ensuring the sustainability of the IPM programme and FFS by developing the capacity of MoA and NCARE staff

Community empowerment: participation <u>of local</u> <u>communities</u> in the entire process of development and implementation of IPM. Farmers within the communities have strengthen knowledge and skills on ecology to come to better field decision making, and contributing to sustainable agriculture.





Reduced environment and health risks: reduced occupational and public health risks to farmers and consumers associated with pesticide use and sustainable and cost effective horticultural production



Better access to local and international markets: high quality crops and products that meet food safety requirements for local markets and that meet the quality standards to allow access to international markets.



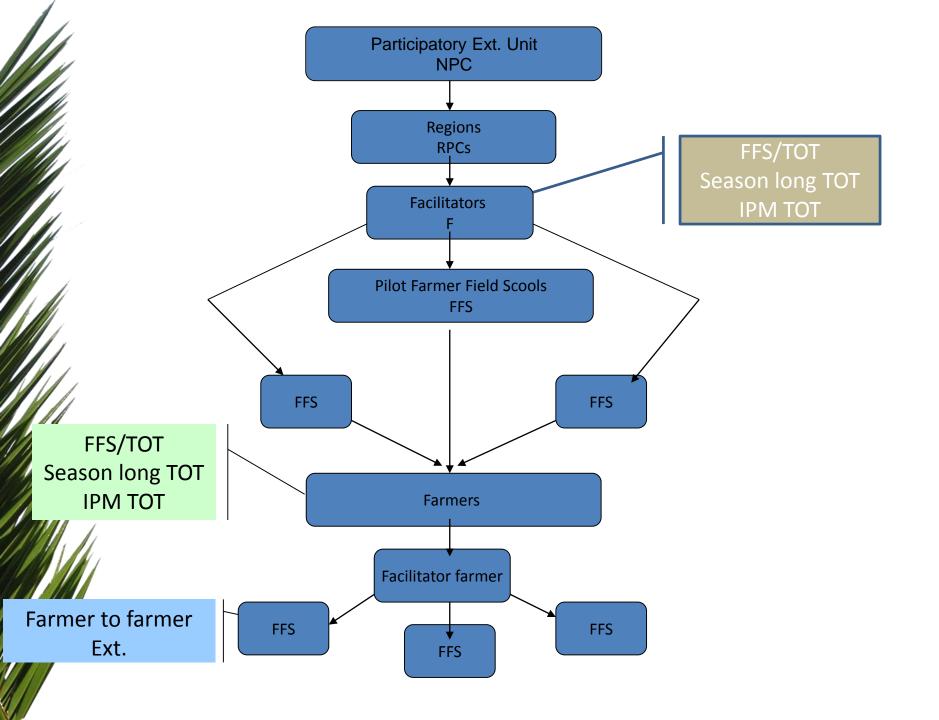
 Increased sustainable and cost effective horticultural production: emphasis on preservation of local agro-ecological environment.

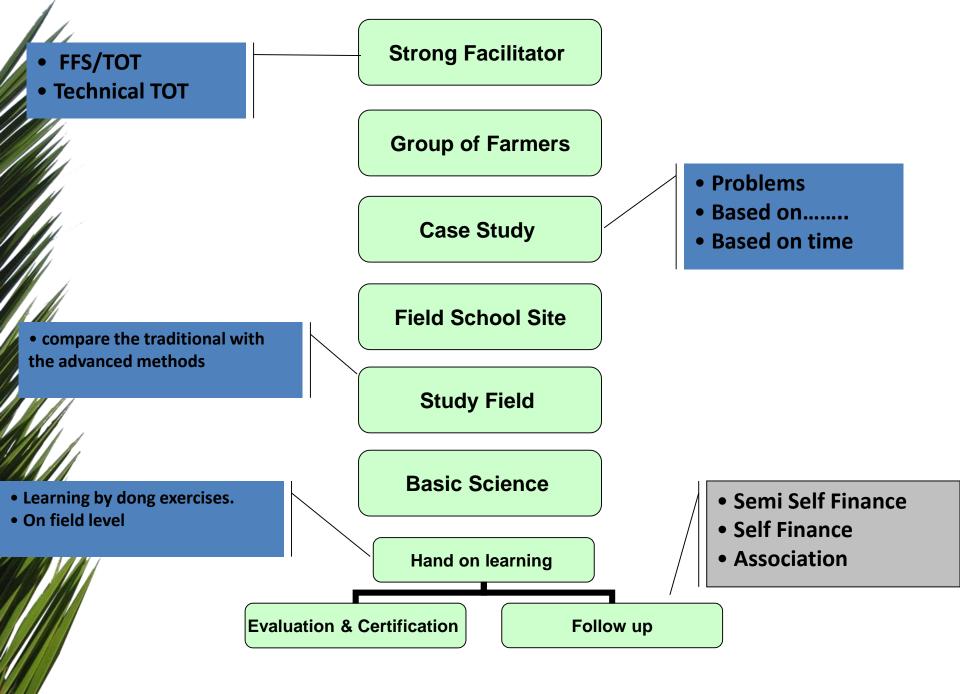


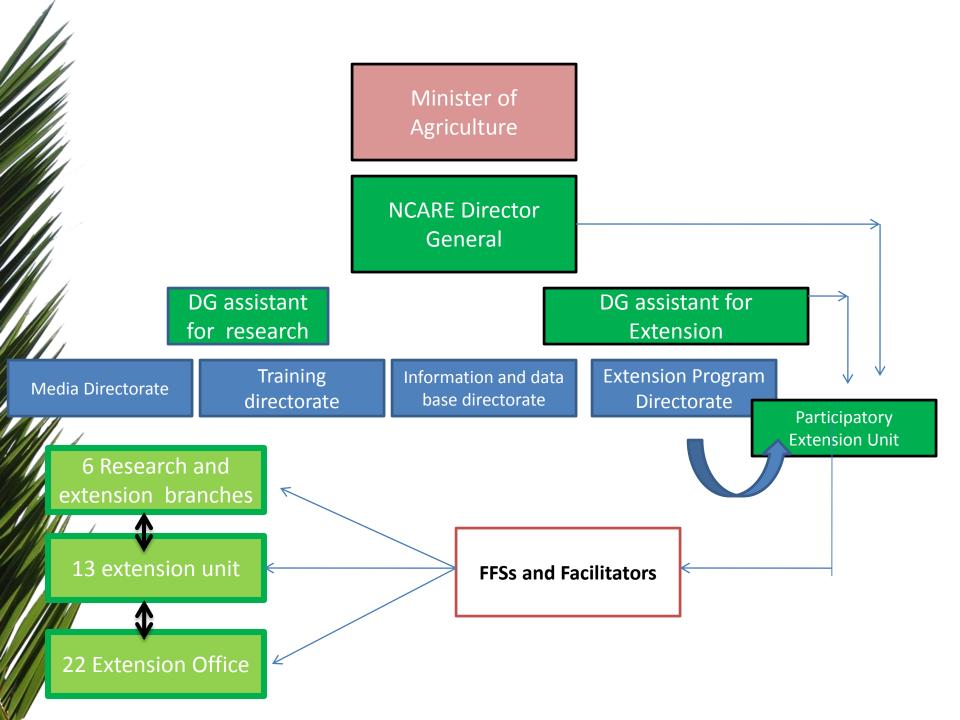


Institutional capacities and infrastructure in the Jordan to sustain the IPM and FFS

In Jordan, the IPM Programme was implemented through the Plant Protection Department (PPD) in the Ministry of Agriculture (MoA). In 2008, MoA restructured its Extension Services to be moved to the National Centre for Agricultural Research and Extension (NCARE). At this time, NCARE made the request to also transfer the IPM programme from PDD, with the aim of using the Farmer Field School (FFS) as an approach to its extension services.







- Develop the capacity of Jordanian farmers in topics of agricultural extensions, such as IPM, Integrated Water Management (IWM) and Integrated Farm Management (IFM), as well as the FFS Approach; and result in more <u>famer-driven research and farmerto-farmer extension.</u>
- FFS have largely focused on vegetable growers; however, there is a need to expand the focus to include fruit tree growers. A significant proportion of cultivated land in Jordan is dedicated to fruit trees and particularly concentrated in the Highlands

FFS have fostered mutual trust and cooperation amongst farmers and has served as a platform for establishing <u>associations</u> such as WAU. These attributes are key to the sustainability of any farmer association. With the success of FFS on agricultural productivity and trader demand for vegetable produces grown using IPM technologies, the formation of producer cooperatives should be a promoted next step for FFS farmers

Support for producer cooperatives requires MoA/NCARE extension agents to take a more <u>market-orientated</u> approach to the support and services they provide to farmers. A lesson learned from the IPM programme is that FFS facilitators must place just as much focus on marketing and related topics as they do on the adaptation of technologies and practices.

Family farming should be included in the projects design at country-level to gain a better understanding of the role of family in horticultural production and community-level decision making, in order to identify opportunities and strategies for family's active engagement in FFS. Greater effort is required to promote the participation of families in FFS and document the impact of the schools on their lives

Thank you for your attention



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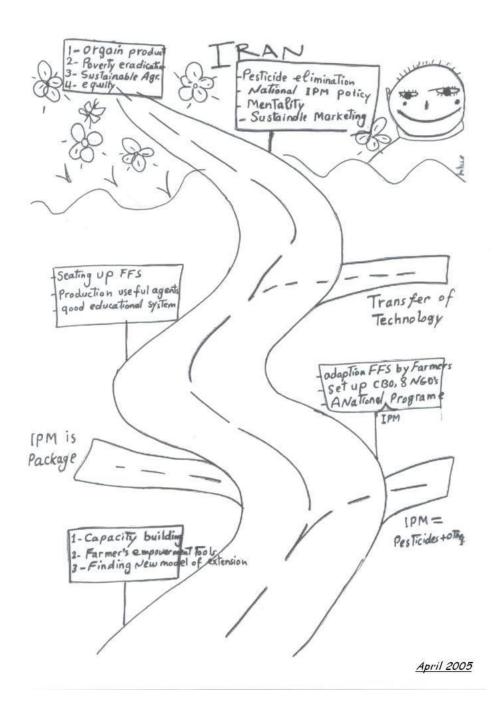








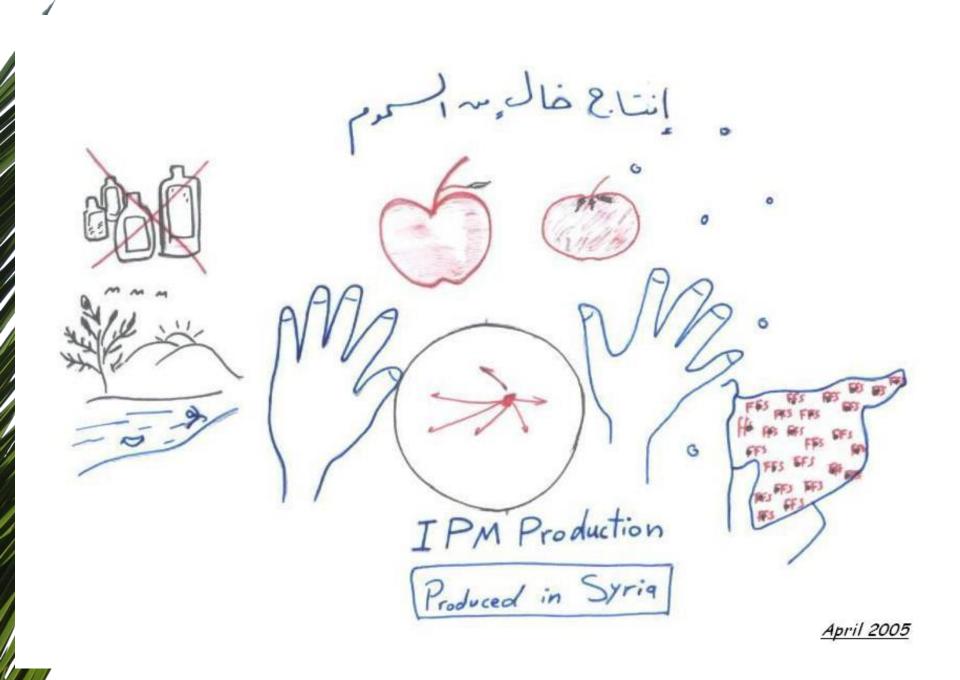
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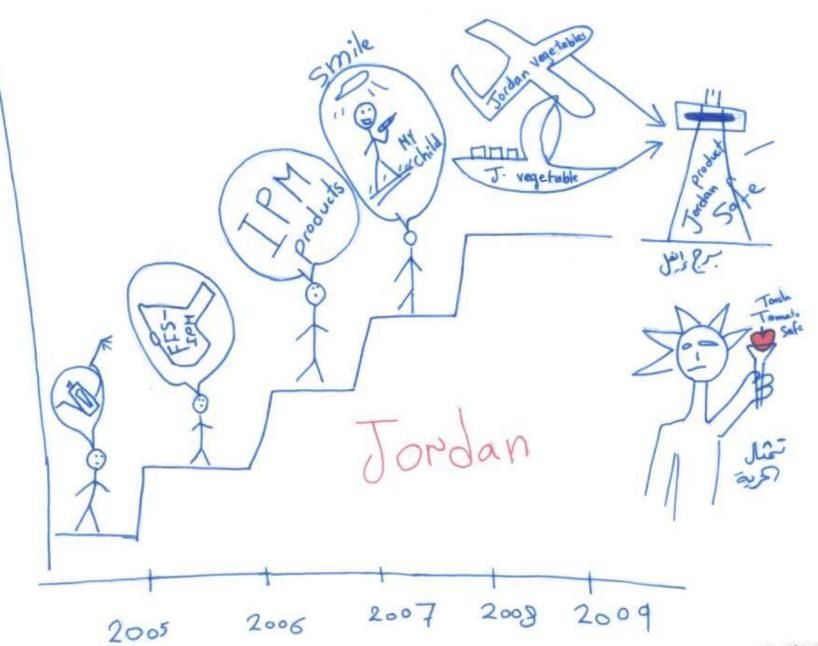


Palestine

Gireen House (Tomato) pesticide used pestide used 3Kg/du 1 Kg/dy 6.5 Kg/du No. of Sprays 10 25 2004 No biological Control 2006 2009 Study Field Farmers us with biological biological control control Farmers use

April 2005





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April 2005