

Review of FAO Experiences in Good Agriculture Practices at Global, Regional and National Levels: Key Lessons and Question

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FAO Role in Good Agriculture Practices

- **FAO provides an international and neutral platform for sustainable agriculture and rural development;**
- **Initiation of a process of consultation Under the Priority Area for Interdisciplinary Action on Integrated Production Systems (PROD PAIA to seek understanding and consensus on the principles, indicators and means of supporting GAP.**



FAO Role in Good Agriculture Practices

- It is not FAO's role to establish an international prescriptive "Super-GAP" or new GAP standards or certification schemes



FAO Role in Good Agriculture Practices

- **High demand by member countries for assistance on horticulture, livestock-based production chains and on sustainable forest products and fisheries to:**
 - **Enter global markets especially for food safety concerns;**
 - **Environmental and social considerations;**
 - **Meet food security needs and**
 - **Improve income of the rural and peri-urban poor**



FAO Role in Good Agriculture Practices

• **Several activities and field projects implemented on various aspects of GAP by multidisciplinary FAO teams but synergies need to be harnessed to provide better coordinated assistance to member Countries**



Projects implemented by FAO

- **GAP to Enhance farmers livelihoods**
- **GAP for horticulture: experiences**
- **GAP for value-chain analysis**
- **GAP for marketing & finance services**
- **Normative codes and guidelines - Fisheries**
- **GAP for Feed, Milk and Meat Sectors**
- **GAP Forestry**
- **GAP for Land Management**



Projects implemented by FAO

- Website:<http://www.fao.org/ag/againfo/home/en/home.html>
- Website:http://www.fao.org/prods/GAP/gapindex_en.htm
- Website:<http://www.fao.org/ag/AGP/AGPC/doc/Default.htm>
- Website:<http://www.fao.org/es/ESC/en/index.html>
- Website:<http://www.fao.org/es/ESA/en/about.htm>
- Website:<http://www.fao.org/ag/ags/index.html>
- Website: <http://www.fao.org/fi/default.asp>
- Website: <http://www.fao.org/forestry/index.jsp>
- Website: <http://www.fao.org/fi/default.asp>
- Website:http://www.codexalimentarius.net/web/index_en.jsp



Key lessons for GAP

- **Recognition of the differences between what constitutes "Good" agricultural practices for researchers, for extension services and for farmers ;**
- **Build consensus on acceptable GAP to all via a platform with key stakeholders ;**
- **GAP requires farmer empowerment for decision making, farm management training.**
- **Better methods needed for 'integrated farming systems GAP' (not just commodity specific GAP).**

Key lessons for GAP

- **Successful compliance/implementation of GAP, three-fold issues should be addressed**
 - a) Information needs (technical know-how of farmers, actors)**
 - b) Financial (sustaining good agricultural practices after initial implementation)**
 - c) Institutional challenges**



Major Challenges

- **The emerging challenge is whether GAP codes and standards can help make agricultural systems more sustainable in a world where food supply chains are increasingly globalized and complex, and pressure on especially small farmers livelihoods is high**



- **Water scarcity and Arid Climate**
- **Climate Change**
- **Shrinking Agricultural Lands and Water.**
- **Erosion of Genetic Resources due to**



- ✓ **Drought**
- ✓ **Salinity**
- ✓ **Desertification**



Annual renewable water resources and irrigation water withdrawal

	renewable water resources*	water use efficiency ratio		irrigation water withdrawal		pressure on water		
		cubic km	percent		cubic km		percent	
			2005/07	2050	2005/07	2050	2005/07	2050
World	42000	50	51	2761	2926	6.6	7.0	
Developed countries	14000	41	42	550	560	3.9	4.0	
Developing countries	28000	52	53	2211	2366	7.9	8.5	
sub-Saharan Africa	3500	25	30	96	133	2.7	3.8	
Latin America	13500	42	42	183	214	1.4	1.6	
Near East / North Africa	600	56	65	311	325	51.8	54.1	
South Asia	2300	58	58	913	896	39.7	38.9	
East Asia	8600	49	50	708	799	8.2	9.3	



Total arable land in use: data and projections

	Arable land in use					Annual growth		
	1961/63	2005/07	2005/07 Adjusted	2030	2050	1961- 2007	1991- 2007	2005/07 -2050
	million ha					percent p.a.		
World	1372	1548	1592	1645	1661	0.28	0.13	0.10
Developed countries	678	624	624	608	586	-0.17	-0.51	-0.14
Developing countries	693	923	968	1036	1075	0.65	0.60	0.24
idem excl. China and India	427	604	668	734	775	0.74	0.70	0.34
sub-Saharan Africa	133	200	240	266	291	0.83	1.25	0.44
Latin America	105	167	202	235	251	0.98	0.61	0.49
Near East / North Africa	86	97	84	84	84	0.31	-0.17	0.00
South Asia	191	204	206	210	213	0.14	0.06	0.08
East Asia	178	255	236	241	236	0.93	0.87	0.00



Problem of Salinity in Oman

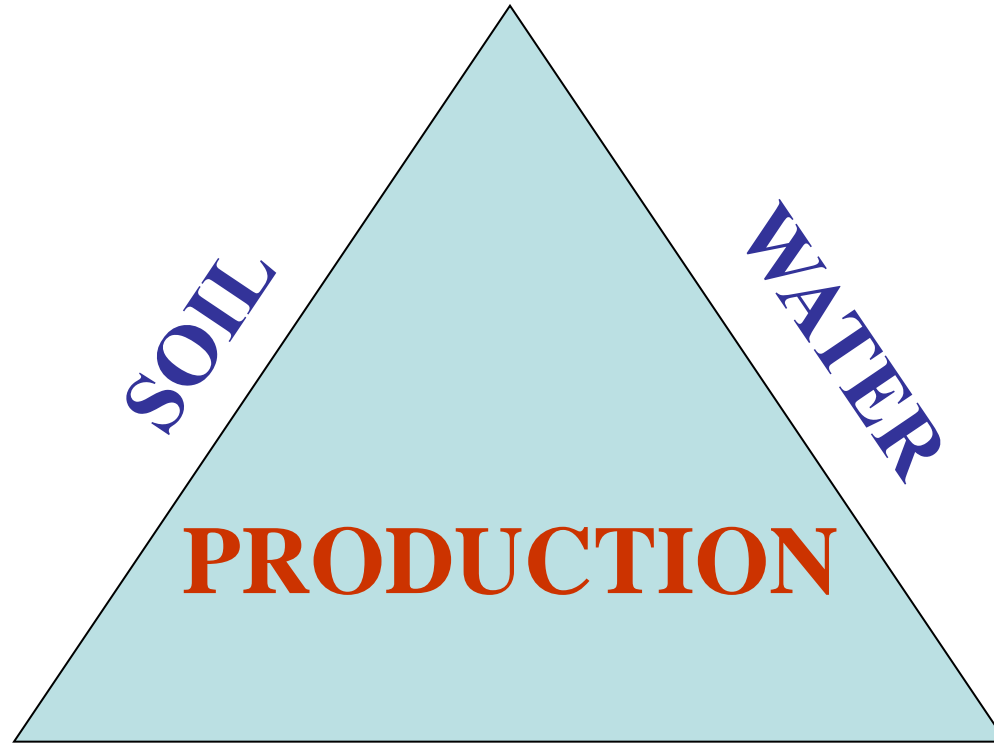


Sources of growth in crop production (percent)

Countries/Regions	Arable land expansion		Increases in cropping intensity		Yield increases	
	1961- 2007	2005/07-2050	1961- 2007	2005/07-2050	1961-2007	2005/07-2050
All Developing countries	23	21	8	6	70	73
sub-Saharan Africa	31	20	31	6	38	74
Near East / North Africa	17	0	22	20	62	80
Latin America and Caribbean	40	40	7	7	53	53
South Asia	6	6	12	2	82	92
East Asia	28	0	-6	15	77	85
World	14	10	9	10	77	80



Building Blocks Solution!!



GENETIC RESOURCES



Higher Yield



Intercropping in Olive Orchards



➤ **Maximize fodder by Intercropping within date orchards**



Hybrid poplars intercropped with a soybean for 3 years (left) have higher biomass than hybrid poplars as sole crop (right). at St-Remi, Quebec,(centre).



➤ **Insurance against crop failure : corn with climbing bean Adapted from: Annual**



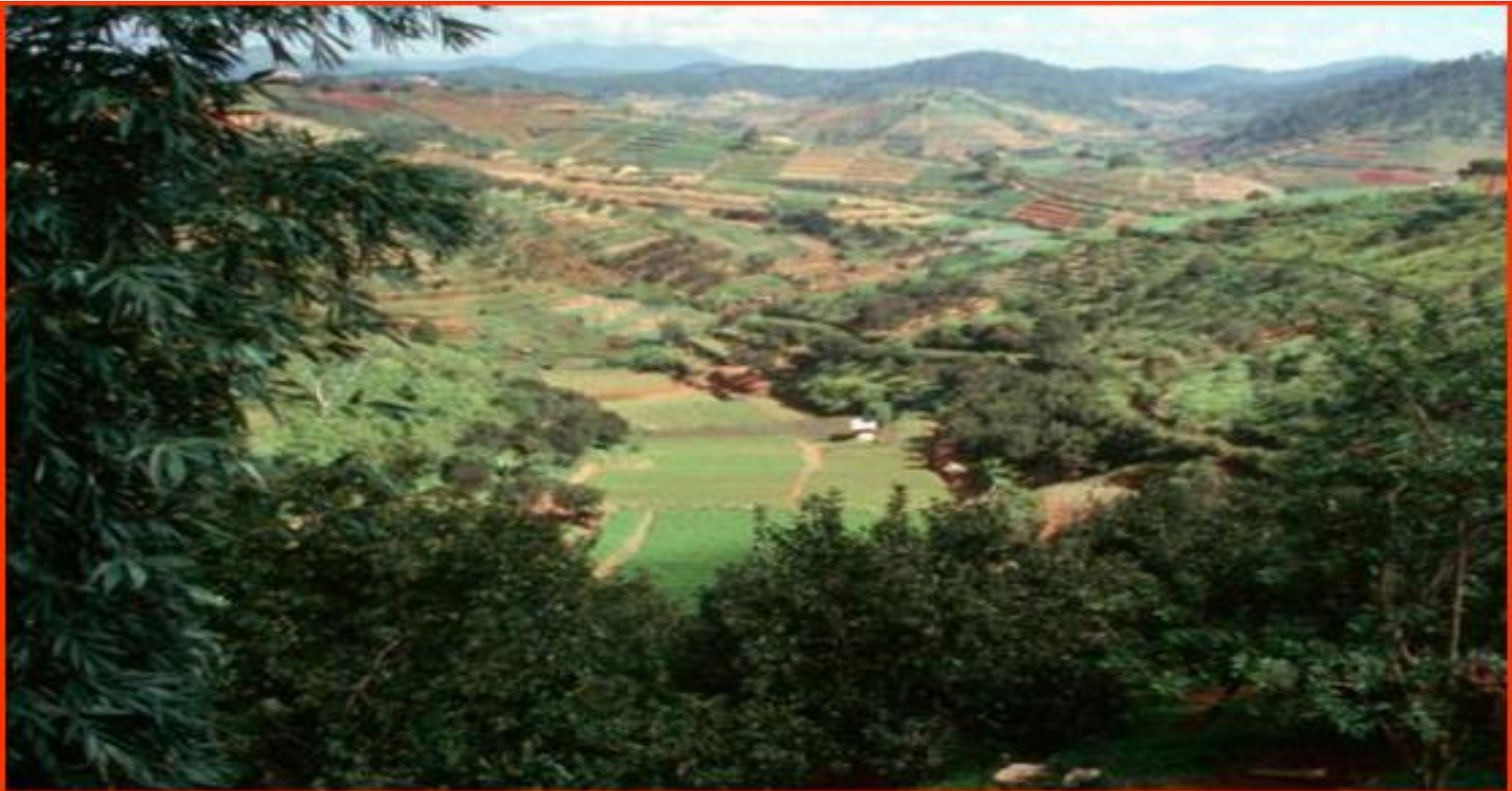
Soybean Intercropped with Wh



Wheat is harvested with little disturbance to the growing soybean crop



‘Multi-functional Agriculture’ for environmental/ socioeconomic sustainability and relief of hunger, poverty and climate change



Cultivation on sloping land is especially vulnerable



Weed problems in Faba beans planted under conservation Agri.



Weed problems in Faba beans planted under conservation Agri.



Oats intercrop with Apple orchard



HOW CAN WE HELP?



Could Quinoa be a suitable crop for Marginal areas



Key Questions

- GAP for non conventional r-Treated waste water??
- 19 regional countries vary in capacities in GAP. How to build up capacities of countries-Should develop national/ country GAPs before or along with Arab GAP?
- What is the place of Organic Farming and Conservation Agriculture into GAP?
- How to tackle the population pressure on land and other natural resources; diversity in ecosystems, farm size, soil nutrition, issues regarding the best use of natural resource; land degradation; food safety; trade; certification; challenges to trade in less advanced domestic markets and intra-regional trade?



Key Questions

- Should we give increased attention to the role of GAP in domestic markets and its relevance for and impact on small farmers, and not just focus on export opportunities?.
- Should we work on GAP for specific commodities (FFV) and for farming systems, although big challenges remain doing the latter because of the complexity of developing decision support tools for farming systems?.
- Should we focus on a sequential decision-making GAP Approach by producers at first choices ('what shall I grow') to the end of on-farm actions - a decision-making process , developed with farmers and other stakeholders, and not prescriptive guidelines. Main focus on farmers' learning and the development of GAP through multistakeholder processes, working with key drivers of change.



THANK YOU

