



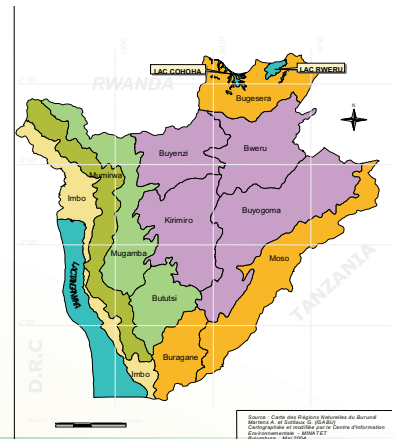
EFFICIENT WATER USE FOR AGRICULTURAL PRODUCTION PROJECT.

Best Practices in Community Based Irrigation

Burundi

Background

This poster illustrates the Best Practices and Best Practice Sites in Community based irrigation in Sudan prepared under the auspice of Nile Basin Initiative's Efficient Water Use for Agricultural Production (EWUAP) Project.



Identified Practices

- In Burundi, more than 99% of the irrigated lands are located in the plains of Imbo, Moso and Bugezera and in the swampy lands (Marais).
- Small scale irrigation (SSI) in the more hilly terrain (e.g. Rwira in Bururi province) represents less than 1% of the total irrigated area.
- Flood irrigation is widely practised with rice accounting for more than 80% of the crops grown.
- Other food crops (tomatoes, onions, corn, potatoes) and industrial crops (sugar cane, palm grove) are grown using furrow irrigation and a very small area using watering cans and trickle irrigation.
- Small Scale Irrigation carried out in the dry season uses small unlined channels mainly irrigated vegetable crops

Practices Sites

- Mparambo
- Rumonge
- Nyabiho
- Murambi
- Rukoziri
- RDCI

Technologies





EFFICIENT WATER USE FOR AGRICULTURAL PRODUCTION PROJECT.

Best Practices in Community Based Irrigation

Democratic Republic of Congo

Background

This poster illustrates the Best Practices and Best Practice Sites in Community based irrigation in the Democratic Republic of Congo prepared under the auspices of Nile Basin Initiative's Efficient Water Use for Agricultural Production (EWUAP) Project.



Identified practices

- Community Based (Small Scale) Irrigation is used in the drier zones of the country for supplementary irrigation and for crop production in the dry season following the rains.
- River diversion, mainly locally constructed and informal structures, pumping from rivers and small storage dams are used for CBSSI.

Practice Sites

- Lemba imbu
- Nzundu
- Kimbanseke
- Lombe
- Ngandu
- Langa langa

Technologies





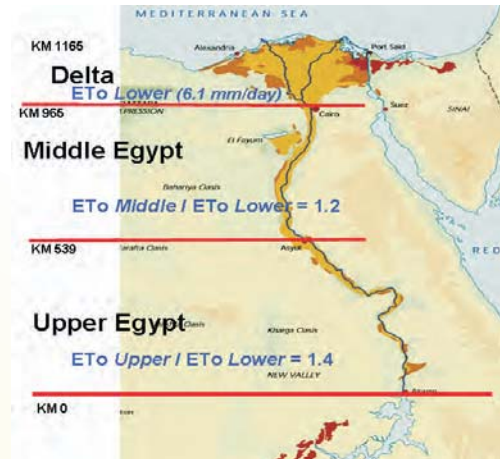
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Best Practices in Community Based Irrigation

Egypt

Background

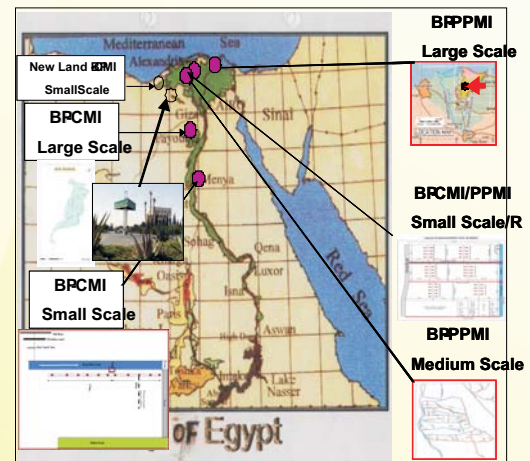
This poster illustrates the Best Practices and Best Practice Sites in Community based irrigation in Egypt prepared under the auspices of Nile Basin Initiative's Efficient Water Use for Agricultural Production (EWUAP) Project.



Identified Practices

Practice Sites

- Basin and furrow irrigation are widely used depending on the crops grown (Basin: rice, wheat, Berseem (clover), feed maize; Furrow: cotton, sugar beet, maize, vegetables).
- On farm improvements that have been introduced include; Lining of Marwas (ditches), Use of larger basins, Furrow lengths and wider furrows. Flexible hoses are also used together with buried piped Marwa.



Technologies





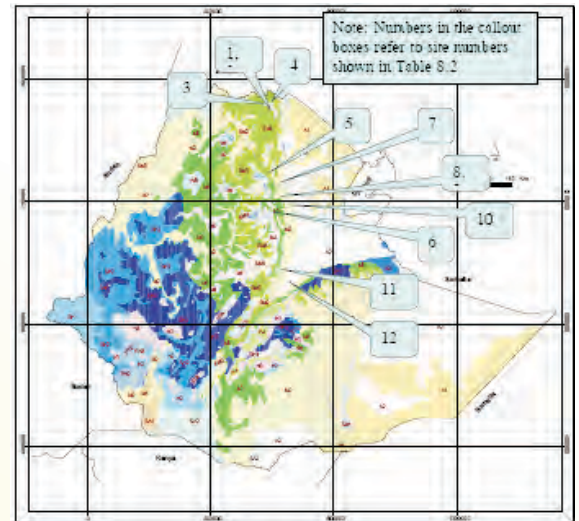
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Best Practices in Community Based Irrigation

Ethiopia

Background

This poster illustrates the Best Practices and Best Practice Sites in Community based irrigation in Ethiopia prepared under the auspices of Nile Basin Initiative's Efficient Water Use for Agricultural Production (EWUAP) Project.



Identified Practices & Sites

- Surge irrigation of Vertisols
- Effective traditional WUA in Wonjela CMI
- Effective traditional WUA in Gedo CMI
- Low pressure gated pipe
- Supplementary irrigation as a priority in use of harvested water
- low cost canal lining material
- New crop varieties

Name of Site		Description of the Significant Parameter	Location	
			Region	Woreda
1	Mai Negus	Higher application efficiency, income per cropped area and output per unit water	Tigray	Laelay Maichew
2	Godino	Increased income & living standard of Irrigators	Oromia	Adaa
3	Chole	Good Irrigation management and Strong WUA	Oromia	Ambo
4	Indris	Good Irrigation management and Strong WUA	Oromia	Ambo
5	Taltale	Expansion of irrigable area	Oromia	Ambo
6	Kobo-Alewuha	Good Irrigation management and Strong WUA	Amhara	Kobo
7	Burka Weldiya	Deficit irrigation and effective traditional WUA	Oromia	Jarso

Technologies





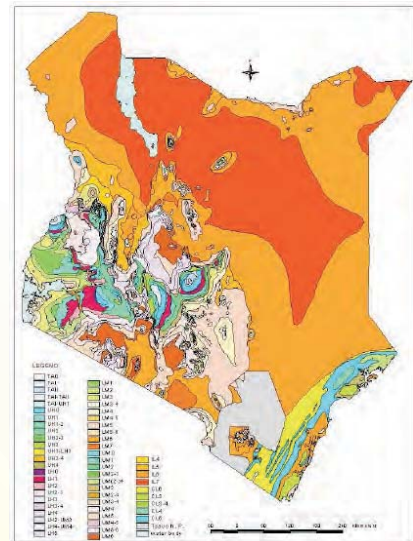
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Best Practices in Community Based Irrigation

Kenya

Background

This poster illustrates the Best Practices and Best Practice Sites in Community based irrigation in Kenya prepared under the auspices of Nile Basin Initiative's Efficient Water Use for Agricultural Production (EWUAP) Project.



Identified Practices & Sites

- Surface irrigation system
 - Pump feed (basin)
 - Pump feed (furrow)
 - Gravity (basin)
 - Gravity (furrow)
- Overhead irrigation system
 - Gravity feed sprinkler system
 - Pump feed sprinkler system
- Drip irrigation system
 - Low head drip irrigation system
 - High head drip irrigation system

Best Practice site CBSSI	Rank
Mitunguu (Meru central district)	1
Kibirigwi (Kirinyaga district)	2
Alanyahoda (Nyando district)	3
Asunda (Nyando district)	4
Alungo (Nyando district)	5
Ngura (Homa bay district)	6
Wahambla (Homa bay district)	7
Abwao (Nyando district)	8

Practice Sites





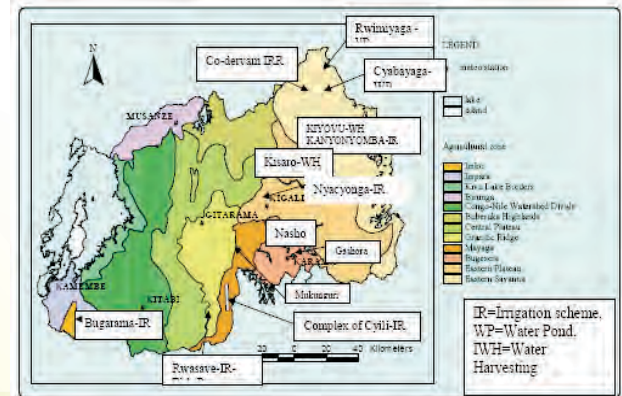
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Best Practices in Community Based Irrigation

Rwanda

Background

This poster illustrates the Best Practices and Best Practice Sites in Community based irrigation in Rwanda prepared under the auspices of Nile Basin Initiative's Efficient Water Use for Agricultural Production (EWUAP) Project.



Identified Practices & Sites

- Development of wet lands (Marais) has formed the basis for irrigation and drainage development in Rwanda.
- Extensive areas of peat swamps have been utilized for cultivation not only of food crops and vegetables, but also tea in the north of the country.
- Sprinkler irrigation is used in Kigali, Nyacyonga and in Bugesera on both private and public managed schemes but this is on a relatively small scale for crops grown during the dry season.
- Drip irrigation is also used on a small scale mostly in the private sector, but government is promoting its use for flowers (roses), vegetables (tomato, snow peas, baby corn), essential oil (pacuri, geranium) and fruits (maracuja,

Site name
Biringanya
Munyazi
Rwasave
Mukunguri
Rugeramigozi 1 (Public/Private/Community)
Gahenerezo (Public)
Rwasave 1
Kanyonyomba
Gakirage
Gashora
Nasbo
Codervam-Ngarama
Nyacyonga (sprinkler)
Kabuye
Mulindi (sprinkler)
Nyacyonga (drip Irrigation)

Technologies & Practice Sites



Limitations

- Lack in human resources capacity
- Poor extension coverage from Government due to high costs of field visits
- Farmers are struggling with water control due poor technology
- Low soil fertility and land mismanagement contributes to low agricultural production.
- High labour inputs not available to resource poor farmers
- Conflict of stored water use between livestock and agriculture in eastern areas where livestock is the predominant activity
- Buffer zones required under environment protection guidelines that results in loss of valuable and scarce agricultural land.



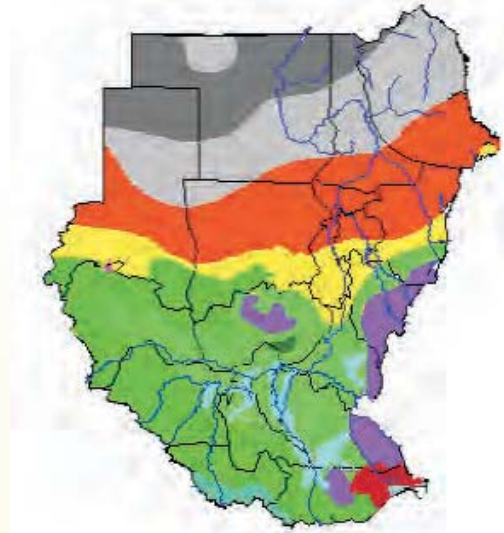
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Best Practices in Community Based Irrigation

Sudan

Background

This poster illustrates the Best Practices and Best Practice Sites in Community based irrigation in Sudan prepared under the auspices of Nile Basin Initiative's Efficient Water Use for Agricultural Production (EWUAP) Project.



Identified Practices & Sites

- Surface irrigation
- Basin irrigation
- Spate irrigation
- Flood irrigation on river banks
- Flood irrigation on seasonal river banks
- Flood islands
- Seasonal stream water courses
- Banks of reservoirs

Best practice Site	
1	Surface irrigation
2	Basin irrigation
3	Spate irrigation
4	Flood on river banks
5	Flood on seasonal river banks
6	Flooded islands
7	Seasonal streams water courses
8	Banks of Dams lakes

Technologies





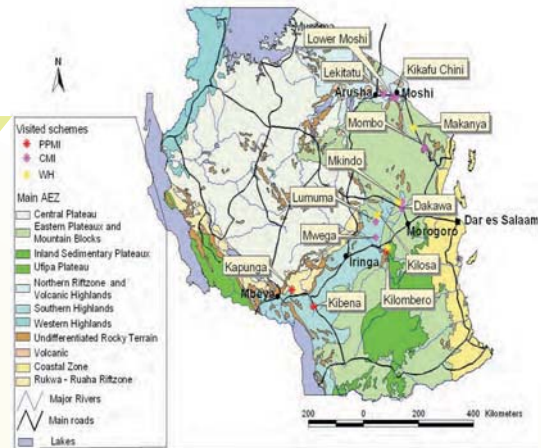
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Best Practices in Community Based Irrigation

Tanzania

Background

This poster illustrates the Best Practices and Best Practice Sites in Community based irrigation in Tanzania prepared under the auspices of Nile Basin Initiative's Efficient Water Use for Agricultural Production (EWUAP) Project.



Identified Practices & Sites

- Almost all schemes are gravity-fed (99%) from surface sources with the remainder using pumps for water abstraction.
- Surface irrigation is practiced widely using furrows and basins with conveyance by both lined and unlined canals.
- Sprinkler irrigation is used by a few large-scale commercial farms with drip rarely used except on pilot schemes run by Government or in small-scale water harvesting.

Irrigation practices	
1	Gravity, open channel (semi-lined), level basin
2	Pumped, piped, lateral drip
3	Gravity, open channel (lined), level basin
4	Gravity, open channel (unlined), level basin
5	Pumped, piped, movable sprinkler
6	Pumped, open channel/piped, pivot
7	Pumped, open channel/piped, movable sprinkler
8	Pumped, open channel (unlined), level basin

Technologies;





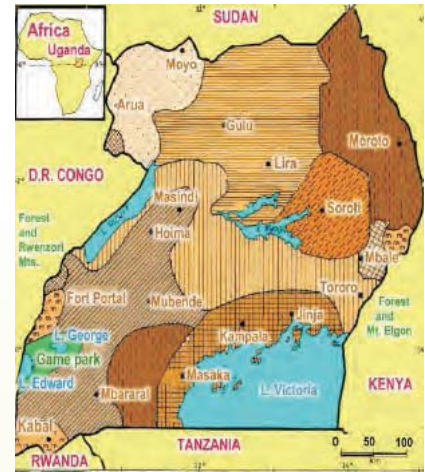
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Best Practices in Community Based Irrigation

Uganda

Background

This poster illustrates the Best Practices and Best Practice Sites in Community based irrigation in Uganda prepared under the auspices of Nile Basin Initiative's Efficient Water Use for Agricultural Production (EWUAP) Project.



Identified Practices & Sites

Most irrigation developments use surface methods although the more recently drip and micro sprinkler have been used in green house irrigated flower farms that started in 1990s.

- Furrow
- Basin
- Sprinkler
- Drip
- Treadle pump
- Watering can/bucket
- Gravity flow/flooding

Irrigation Site, ownership	District	Crops
Iganga Paddy rice growers communities	Iganga	Rice
Pallisa Paddy rice growers communities	Pallisa	Rice
Tororo Paddy rice growers communities	Tororo	Rice
Mr. Sembusi Richard Bulenge Village Buwunga sub county Private/community	Masaka	Coffee, banana, pineapple, coffee nursery, fish pond
Mr. Mpinde Livingstone Katolerwa village Kibinge sub county. Private	Masaka	Coffee, coffee nursery

Technologies

- Community small scale irrigation
- Public private large scale irrigation

