Agriculture Coordination Working Group Journal

FAO ZIMBABWE

September 2012
Issue No. 74

In This Issue

Articles drawn from presentations compiled by the following organizations

To download full presentations go to www.acwg.co.zw

Next ACWG meeting

Date: 25 October 2012
Time: 9.00 am
Venue: Celebration Centre
162 Swan Drive
Borrowdale
Harare.

FAO coordination activities, including the publication of the FAO Journal, are funded by the following Donor Organizations

ACWG Journal is published monthly by FAO Zimbabwe
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NEWS

- **2012 FAO Agriculture Photo Contest:** The theme for this year is **Agriculture Innovations to Improve Food Security and Nutrition.** Send photos by email to *caroline.hungwe@fao.org* by 31 October 2012 .
- **Drought Mitigation Programme:** The Government has allocated USD 2 million for the purchase of feed and veterinary medicines. Procurement and distribution has commenced in Matabeleland South and Matabeleland North provinces.

Upcoming Events

Events	Host/Chair	Where	Date
Conservation Agriculture Training	**Foundations for Farming** bookings@foundationsforfarming.org 0772136780	Rest Haven Harare	2-4 Oct 2012 16-18 Oct 2012 13-15 Nov 2012 27-29 Nov 2012
		Mutare	23-25 Oct 2012
		Masvingo	9-11 Oct 2012
		Kadoma	30 Oct-1 Nov 2012
Promoting Affordable Sources of Plant Nutrients in Africa Through Innovative Composting Alternatives.	**International Fertilizer Development Center** e-mail: training@ifdc.org; www.ifdc.org	Accra, Ghana	26-30 Nov 2012
National Seed Expo	**Seed Services Institute** email: seedserv@iwayafrica.co.zw	Harare (HICC)	10-11 Oct 2012

2012/2013 Rainfall Outlook

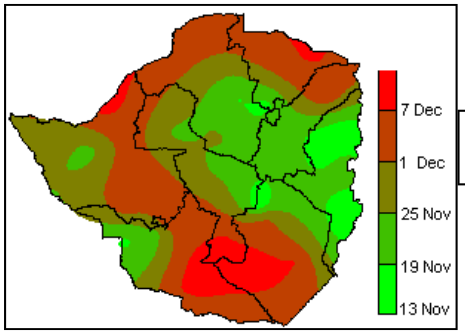
By Metrological Service Department- *T Mushore -tel: 04-778160 -tdmushore@gmail.com*

According to the Meteorological Services Department, region 1 and 2 (Harare, much of Mashonaland East, Mashonaland West, Matebeleland North, Mashonaland Central, northeastern parts of Midlands and most of Manicaland) are expected to receive normal to above normal rainfall while region 3 (Matabeleland South, Masvingo, the bulk of Midlands, the southern parts of Manicaland and Mashonaland East) is expected to receive normal to below normal rainfall during the first half of the season covering the period October, November and December 2012.

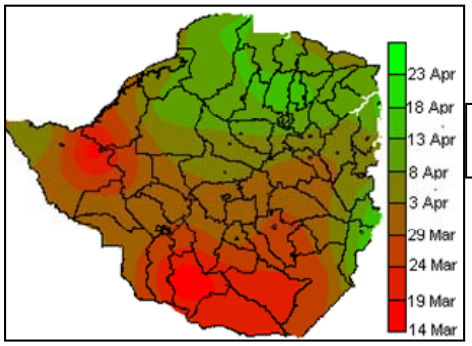
In the second half of the season covering January, February and March 2013 normal to above normal rainfall is expected in region 1 and 2 (Mashonaland Provinces, Harare, most of Manicaland, northern parts of Midlands, most of Matabeleland North and Bulawayo. Normal to below normal rainfall is expected in region 3 (Matabeleland South, Masvingo, southern parts of Midlands and the extreme southern parts of Manicaland).

Start of season- Map 1 shows the mean onset dates. The rainfall season is expected to start before the end of November 2012 for the bulk of regions 1 and part of region 3.

End of season-The season is expected to end by 29 March for the bulk of the country (Map 2). The length of the season is expected to vary between 95 days to 165 days with the southern parts experiencing the shortest season length and the central and eastern parts of the country having the longest.



Map 1: Start of season



Map 2: End of season

August 2012 Price Watch

Bucket of maize grain (17.5Kg):	USD 5.00	(was USD 4.00 last month)	
Super White maize meal (10Kg):	USD 6.97	(was USD 6.85 last month)	
Roller Meal (10Kg):	USD 4.55	(was USD 4.25 last month)	
Big bundle of leafy vegetables	USD 2.00	(was USD 1.50 last month)	Small bundle: R1 (Unchanged since Sept 2011)

Updating the Zimbabwe Tick Distribution Map

By Central Veterinary Laboratory Research Unit –Dr Hobodo- tel: 04-705885 - tinashehbd@gmail.com

The Central Veterinary Laboratory Tick Research Unit is conducting a tick survey for updating the Zimbabwe Tick Distribution Map.

Objectives

- To update the Zimbabwe tick distribution map according to the 5 natural regions of the country by October 2013
- To match the tick distribution with the respective tick born diseases

Methodology

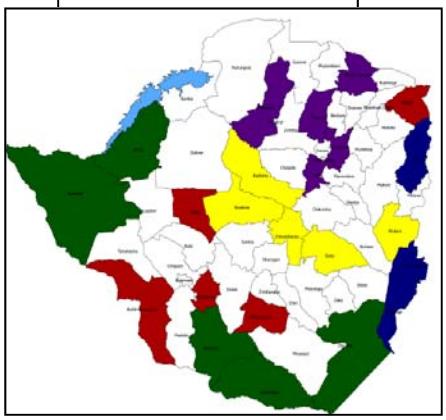
A total of 23 districts have been selected from the five natural regions of the country. Ten dip tanks per district will be randomly selected for tick sampling. Five dip tanks per district will be alternately sampled per month.

10 infested cattle will be observed per every 500 cattle per dip tank. Ticks and 2 blood smears per animal will be collected and analyzed

Progress

- Training on tick identification and taxonomy is complete.
- Field consumables and laboratory reagents have been procured. .

MAP 3: Selected districts



Update on Dipping Services—Department of Livestock and Veterinary Services

By Dr Ndhlovu –tel: 04-706363- felistasndlhovu@yahoo.com

The Department of Livestock and Veterinary Services received financial assistance from the Food and Agriculture Organization of the United Nations (FAO) to support dipping services across the country.

Aim: Improving rural livelihoods and household food security by reducing cattle and goat morbidity and mortality through provision of acaricide with the participation of farmers.

Expected output: Reduced livestock mortality due to control of tick borne diseases through provision of an effective dipping programme.

Activities

- Co-ordination and distribution of dipping chemicals to provinces, districts, animal management health centres dip tanks
- Supervision and co-ordination of dipping activities
- Improving the effectiveness and sustainability of community based dipping committees through training

Achievements

- The provision of dip chemicals led to an uninterrupted dipping regime.
- 582 055 stock owners benefited from the programme and approximately 4 185 150 cattle were dipped.
- Functional dipping committees were established at all dip tanks.
- Dip fee collection improved two fold.
- Increased community ownership of dipping.
- Improved small stock dipping.
- 872 Veterinary Extension Assistants, 1 039 Dip tank Assistants and 9 129 Livestock Dip Committee members received training on disease surveillance, efficient dipping methods and dip tank management .

Constraints

In the initial stages transportation challenges were experienced.

Impact

As a result of the dipping activities the total number of tick borne cases reported reduced by 4% and deaths associated with tick borne diseases decreased from 40% (2010-2011) to 35% (2011-2012).

Province	TB as % of total cases		TB mortality as % of total losses	
	2010-2011	2011-2012	2010-2011	2011-2012
Manicaland	35	26	39	23
Mash Central	21	22	42	32
Mash West	19	27	50	52
Mash East	59	32	75	40
Masvingo	37	40	30	71
Mat North	15	3	39	9
Mat South	4	11	19	18
Midlands	14	19	30	32
Average	26	22	41	35

Human Wildlife Conflict Project

By FAO- Maxwell Phiri -tel: 04- 791407—maxwell.phiri@fao.org

FAO in collaboration with the Zimbabwe Parks and Wildlife Authority (ZPWMA) implemented the Human Wildlife Conflict (HWC) project in Mbire, Hwange and Chiredzi districts.

Overall objective: To improve food security and rural community livelihoods and to sustainably manage natural resources in the project areas

Through the project a **HWC toolkit, chilli gun, solar powered electric fence, animal watch tower and sms report system** were developed to mitigate HWC. Problem Animal Control (PAC) units and a HWC Resource Education Centre were established in the project areas and Harare respectively.

Rangers from ZPWMA and Scouts from rural district councils received training in either PAC or animal capture involving darting and translocation. In addition public education campaigns on HWC were conducted.

To improve communication between the parks main camp and ZPWMA headquarters a V-Sat system was installed at Hwange camp. Laptops, desktop computers, uniforms and 16 rifles for problem animal control were distributed.

Lessons learnt

- Increase in spatial spread of settlements has increased HWC;
- Some tools e.g. the electric fence are not affordable to farmers;
- Some mitigation tools are restricted to only one animal species e.g. the chilli gun can be only be used on elephants;
- Traditional methods of managing HWCs such as noise making using metal tins and lighting fires are still widely practiced.

Biogas Awareness

By SNV – Chandi Mutubuki-Makuyana – tel: 0773615156- cmubukikuyana@snv.org

SNV has been active in the renewable energy sector since 1989 in Asia and has implemented the Africa Biogas Partnership Programme in six countries (Burkina Faso, Senegal, Ethiopia, Kenya, Uganda and Tanzania, Rwanda). In Zimbabwe SNV has launched a five year biogas project and intends to set up 8 000 bio-digesters.

What is Biogas

Biogas is renewable energy that is perennial or recurring and originates from bacteria in the process of bio-degradation of organic material under anaerobic (without air) conditions.

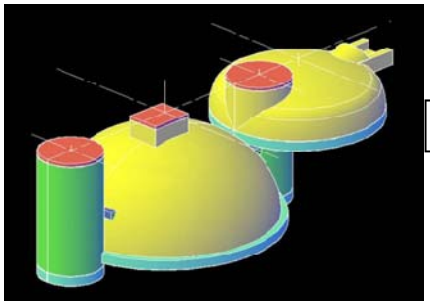


Fig 1:Solid state digester

Main Drivers for Biogas

- Domestic fuel situation becoming cumbersome
- Frequent power interruptions versus demand for energy
- Value of (organic) fertilizer widely recognized
- Political support to promote biogas technology

Ideal conditions for biogas production

- The main ingredients are feedstock (chicken manure or cow dung) which should be fed **daily** and fresh water.
- The ideal temperature is 35 °C. Yield of biogas decline when temperature drops and fermentation stops under 10 °C.
- An airtight digester is required as methane-producing bacteria are sensitive to oxygen

Table 1 Feedstock and feeding requirements of bio-digestors

Biodigester size (m^3)	Initial feeding (cattle dung) (kg)	Daily dung feeding (kg)	Water (litre)	Use of biogas stove (hour)	Use of biogas lamp (hour)
4	1500	20-40	20-40	3.5-4	8-10
6	2300	40-60	40-60	5.5-6	12-15
8	3000	60-80	60-80	7.5-8	16-20
10	3800	80-100	80-100	9.5-10	21-25

Benefits

- Reliable and cost effective energy for cooking and lighting;
- Enhances soil productivity because of the use of bio-slurry;
- Promotes Livestock development and preservation of forests;
- Improved household sanitation due to absence of soot, ashes and firewood in the kitchen;

Cost

The estimated cost of a 6 m^3 bio-digester is **USD 1 033** and the payback period for the initial cost is between 1.3 and 1.6 years.

Issues for Biogas in Zimbabwe

- High initial investment costs
- Private sector investment in rural areas is limited
- Biogas companies will have to be established from scratch
- No local manufacturing of biogas appliances