

**BUILDING ADAPTATIVE CAPACITY TO CLIMATE
CHANGE IN A LEAST DEVELOPED COUNTRY
(LDC)**

THE RURAL SECTOR IN MALI

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BRIEF “OVERVIEW” OF MALI

**MALI IS A SEMI - ARID AND LANDLOCKED COUNTRY
LOCATED IN THE WESTERN PART OF THE AFRICAN
CONTINENT**

**AREA > 1,240,000 Km² OF WHICH MORE THAN ONE-THIRD
IS DESERTIC**

POPULATION = 11,400,000 INHBTS

LIVESTOCK : CATTLE : 7,5 00, 000

SHEEP AND GOATS : 13,000,000

CAMELS : 700, 000

INCOME/PERSON < US\$ 1 / DAY, MALI IS AN LDC

**LENGTH OF RAINY SEASON VARIES FROM 2 MONTHS IN THE NORTH. TO 5 - 6 MONTHS TOWARDS THE SOUTH
DROUGHT IS VERY COMMON**

AGRICULTURE - BASED ECONOMY

CASH CROP = COTTON ANNUAL PRODUCTION : 500,000 TONS

MAIN CEREAL CROPS = MILLET, SORGHUM, MAIZE, RICE,

ANNUAL PRODUCTION : 2,850,000 TONS

COUNTRY OF VERY HIGH VULNERABILITY TO CLIMATE CHANGE

DROUGHTS OF EARLY SEVENTIES IN SAHEL REGION AFFECTED SERIOUSLY COUNTRIES

A LOT OF DAMAGES WERE CAUSED TO AGRICULTURE, LIVESTOCK AND EVEN HUMAN BEINGS.

TWO MAIN ACTIONS WERE TAKEN :

- AN INTER STATE COMMITTEE TO COMBAT DROUGHT IN SAHEL (CILSS) WAS ESTABLISHED IN 1974 BY A MINISTERIAL CONFERENCE

-IN THE REGION IN 1975, AGRHYMET REGIONAL PROGRAM WAS LAUNCHED BY UNDP, WMO, FAO AND THE INTERNATIONAL COMMUNITY

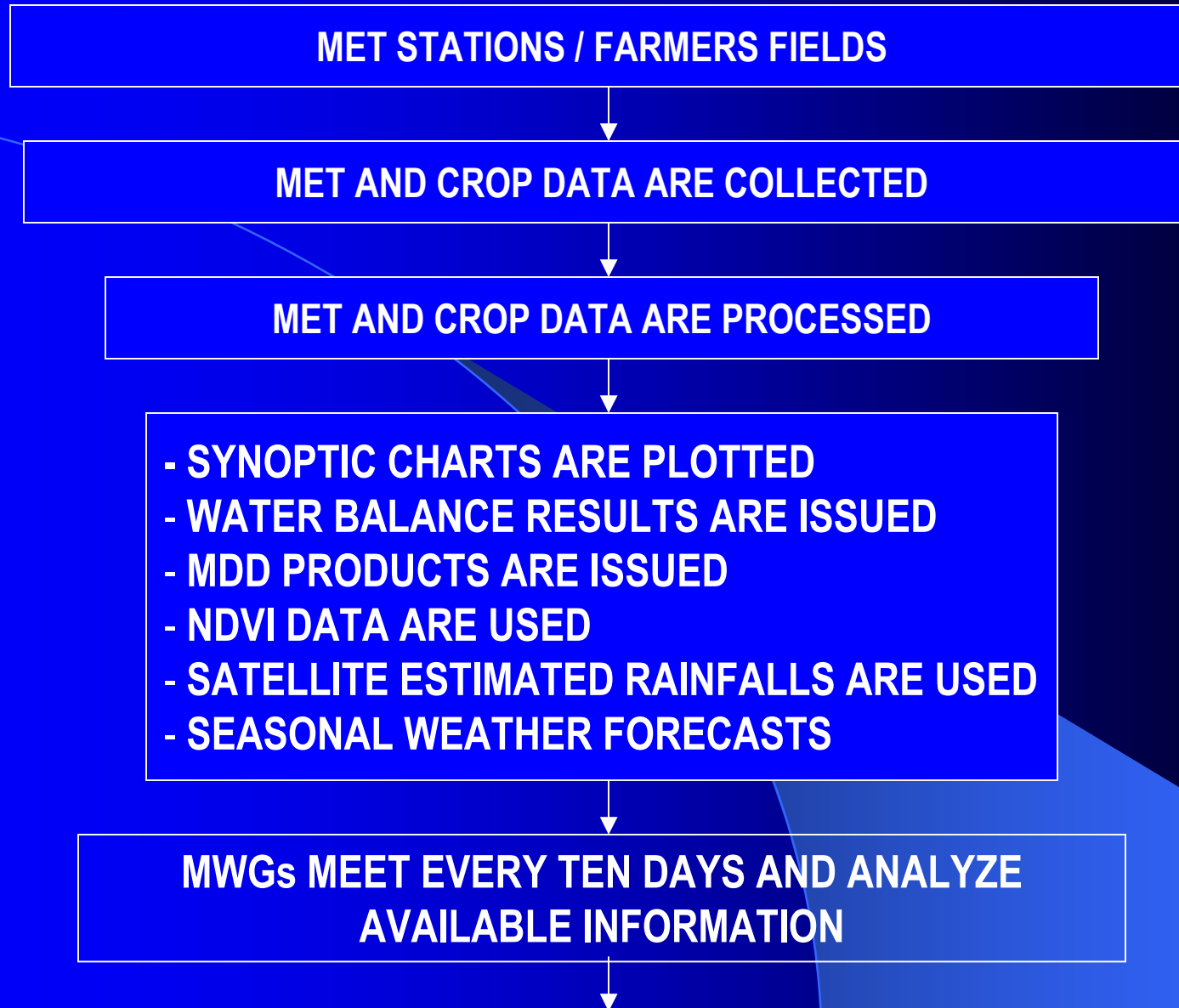
AGRHYMET REGIONAL PROGRAM WAS COMPOSED OF A REGIONAL CENTER IN NIGER AND A NATIONAL COMPONENT IN EACH OF THE 9 CILSS MEMBER COUNTRIES.

THE MAIN OBJECTIVE OF THE PROGRAM WAS TO STRENGTHEN METEOROLOGICAL AND HYDROLOGICAL SERVICES IN THE REGION BY :

- REHABILITATING AND STRENGTHENING SURFACE OBSERVING AND TELECOMMUNICATION NETWORKS.**
- TRAINING SPECIALIZED STAFF AT THE AGRHYMET REGIONAL CENTER**
- CREATING / REINFORCING AGROMET AND HYDRO UNITS**

THIS OBJECTIVE WAS SUCCESSFULLY ACHIEVED IN MALI ENABLING THE NATIONAL MET SERVICE TO UNDERTAKE ACTIVITIES TO DEVELOP AN INFORMATION SYSTEM FOR DECISION MAKERS AND FARMERS.

SCHEMATIC REPRESENTATION OF THE INFORMATION SYSTEM



ISSUANCE OF A TEN – DAY AGROHYDROMET BULLETINS

EARLY WARNING COMPONENT

- RAINFALL SPATIAL AND TIME DISTRIBUTION OVER THE COUNTRY
- HYDROLOGICAL INFO FOR MAIN WATERWAYS IN THE COUNTRY
- CROPS PESTS AND DISEASES
- PASTURES
- LIVESTOCK
- MET, AGROMET AND HYDRO OUTLOOKS

- NATIONAL RADIO AND TV BROADCAST
- WRITTEN PRESS, LOCAL RADIOS

DISSEMINATION TO DECISION MAKERS

AGROMET ADVICE COMPONENT

- APPROPRIATE TIME FOR AGRICULTURAL PRACTICES (PLANTING, WEEDING, APPLICATION OF FERTILIZERS INSECTICIDES, PESTICIDES....)
(COMPLETED BY DAILY WEATHER FORECASTS, 12 HRS-3 DAYS)

- NATIONAL RADIO AND TV BROADCAST
- WRITTEN PRESS, LOCAL RADIOS
- OBSERVERS/EXTENSION PEOPLE

DISSEMINATION TO FARMERS

FOR THE AGROMET ADVICE COMPONENT WE PREPARED IN LOCAL LANGUAGES PRACTICAL PLANTING DATE GUIDES THAT CAN BE DIRECTLY USED BY FARMERS.

IN THIS REGARD FARMERS ARE TRAINED TO CARRY OUT RAINFALL MEASUREMENTS AND PHENOLOGICAL OBSERVATIONS IN LOCAL LANGUAGES.

A SPECIAL RAINGAUGE DESIGNED FOR FARMERS IS MANUFACTURED IN MALI TO FACILITATE THE USE OF THE GUIDE



RAINGAUGE



FARMERS LEARNING HOW TO MEASURE AND REPORT RAINFALL DATA

RESULTS

- CONTRIBUTION TO FOOD SECURITY

- REDUCTION OF THE PERCENTAGE OF REPLANTING (40% TO 5%)
- YIELD INCREASE $\geq 20\%$
- IN 1998 USE OF MET AND AGROMET INFORMATION PREVENTED THE AGRICULTURAL SEASON FROM FAILURE
- IN JANUARY 2002 FORECAST OF « OUT OF SEASON » RAINS ALLOWED THE NATIONAL COTTON COMPANY TO SAVE MILLIONS OF EUROS
- NAT MET SERVICE IS A MEMBER OF THE NATIONAL COUNCIL FOR AGRICULTURAL ADVICE
- THE INFO SYSTEM IS INTEGRATED TO THE AGRICULTURAL ADVICE OPERATIONAL PLAN OF ACTION AND TO THE EARLY WARNING SYSTEM FOR FOOD SECURITY

- SOCIAL AND CULTURAL ADVANTAGES :

- SHARING THE SAME AGROMET INFO CONTRIBUTE TO REDUCE CONFLICTS IN HOUSEHOLDS AND VILLAGES ;
- REDUCTION OF RURAL DEPOPULATION

-ENVIRONMENT PROTECTION

- USE OF MET AND AGROMET INFO RESULTED IN REDUCTION OF THE NUMBER OF TREATMENTS BY PESTICIDES AND INSECTICIDES

PERSPECTIVES ON ADAPTATION FOR LDCA

- GENERALIZATION OF THE INFO SYSTEM TO THE COUNTRY AS A WHOLE
- INTEGRATION OF THE INDIGENOUS KNOWLEDGE INTO THE SYSTEM –
LOCAL COPING STRATEGIES
- FINANCIAL SUPPORT OF LDCA TO THE PROGRAMME REQUIRED.
- IMPROVING ADAPTATIVE CAPACITY OF THE MOST VULNERABLE IS THE MOST IMPORTANT ADAPTATION POLICY – THESE ARE THE PEOPLE WHOSE LIVELIHOOD WOULD BE MOST AFFECTED BY THE IMPACTS OF CLIMATE CHANGE.

I WOULD LIKE TO END MY PRESENTATION BY THE STATEMENT OF A 70-YEAR OLD FARMER:

« WITHOUT CLIMATE INFORMATION A FARMER IS LIKE A MOUSE IN²A BOTTLE »



That's an illustration of how sensitized the rural people are on climate issues as it is the old people who are more reluctant to innovations.

**THANK YOU
FOR YOUR ATTENTION**