







AFRICA ADAPTATION PROGRAMME ON CLIMATE CHANGE GHANA

FINAL PROJECT REVIEW REPORT

ACRONYMS

AAP – Africa Adaptation Programme

CC – Climate Change

CCA – Climate Change Adaptation

CPAP – Country Programme Action Plan

DRR – Disaster Risk Reduction

EPA – Environmental Protection Agency

EWS - Early Warning System

GMet – Ghana Meteorological Agency

MoFEP – Ministry of Finance and Economic Planning

NADMO – National Disaster Management Organisation

NDPC – National Development Planning Commission

UNDP – United Programme Development Programme

EXECUTIVE SUMMARY

There is clear evidence that, in Ghana, the coastal zone, agriculture (including fisheries, cocoa, cereals, and root crops production), and water resource sectors, as well as human health and rural livelihoods are vulnerable to climate change and climate variability. With funding of US\$2,754,000.00 from the Japanese Government, the Africa Adaptation Programme (AAP) in Ghana responded to these challenges by promoting systemic change for a more integrated and holistic approach to climate change adaptation. This was through the provision of inputs into a comprehensive programme that would develop early warning systems in the country, as well as supporting strategic policy dialogue, capacity development approaches and finance options.

The Programme had five (5) targeted outputs with various activities and budgets assigned to each activity according to the project document. UNDP Ghana administered the funds and the Project Management Unit (PMU) made payment request to access the funds. Expenditure for the years 2010 to 2013 were US\$658,787.13; US\$825,180.93; US\$1,183,857.43 and US\$1,492.89 respectively.

Through the funds, AAP Ghana engaged stakeholders at sub-national, national and international levels, ensuring a broader spectrum of stakeholders were involved to achieve tangible results. In addition to building capacities and influencing policy, AAP Ghana worked closely with five pilot districts to implement practical adaptation projects; a test case of translating policies into local actions. On the whole, the project was able to achieve, as at 31 January 2013, about 96.9% of its allocated resources for the planned activities. total allocated resources by 18th January 2013, leaving operational expenses to be spent in January and February 2013. Key achievements of AAP Ghana include, among others,

- I. Mainstreaming of Climate Change into District level (Local Government) planning and budgeting
- II. Successfully organized policy dialogues with High Level policy and decision makers to influence the incorporation of climate change into national policy development and implementation agenda
- III. Mobilized financial support for the development of the National Climate Change Policy (NCCP)
- IV. Supported to the Ghana Meteorological Agency (GMet) to improve the frequency, volume, and quality of weather data by procuring and installing 8 Automated Weather Stations (AWS) and 1 High Speed Computer and providing training to GMet Staff to gather, monitor, and utilize weather data for improved weather forecasting, early warning, and future climate projections
- V. Developed flood and drought hazard mapping for 5 pilot districts
- VI. Researched about and catalogued indigenous knowledge of climate change in 6 districts in Ghana for informed future adaptation
- VII. Practical adaptation projects in 5 pilot districts
- VIII. Developed and published knowledge materials on climate change such as policy advisory series (PAS), Audio Visual materials, etc. These materials have been widely disseminated.

It must be mentioned that the project was faced with some challenges including, administrative/procedural and financial challenges especially at the latter stages of the implementation. In spite of these challenges, the PMU and its partners worked assiduously to ensure that activities are implemented as effectively as possible.

The government of Ghana demonstrated its committed to the project implementation by cofinancing the project in cash and also in kind through the Environmental Protection Agency, the implementing agency.

TABLE OF CONTENTS

ACRONYMS	2
EXECUTIVE SUMMARY	3
Contents	4
1.0 CONTEXT	7
Background	7
Objectives of AAP Ghana	7
Expected Outputs	7
Project Implementation Framework	7
2.0 PROJECT RESULT SUMMARY	8
Results by Outputs	8
Output 1: Dynamic, long-term planning mechanisms to cope with the inherent uncertainties of climate change introduced.	8
Output 2: Leadership and institutional frameworks to manage climate change risks and opportu in an integrated manner at the local and national levels strengthened.	
Output 3: Climate-resilient policies and measures in priority sectors implemented	9
Output 4: Financing options to meet national adaptation costs expanded at the local, national, s regional and regional levels.	
Output 5: Knowledge on adjusting national development processes to fully incorporate climate change risks and opportunities generated and shared across all levels	
Pilot Projects	10
Sisala East District:	11
Fanteakwa District:	11
Keta District:	11
West Mamprusi District:	11
Aowin Suaman District:	11
Studies Undertaken Under AAP	11
3.0 PERFORMANCE REVIEW	12
3.1 Progress Review	12
3.1.1 Overall progress towards Country Programme Action Plan Outcomes and Outputs	12
3.1.2 Subsection for each Outcome	12
3.2 Implementation Strategy Review	22
3.2.1 Sustainability	22

3.2.2 Participatory/Consultative Process	23
3.2.3 Quality of Partnerships	23
Leadership and Institutions	23
3.2.4 National Ownership	25
3.3 Management Effectiveness Review	25
3.3.1 Monitoring and Evaluation	25
3.3.2 Timely Delivery of Output	26
3.3.2 Resource Allocation	26
4.0 IMPLEMENTATION ISSUES	26
Staffing and Capacity Issues:	26
Monitoring & Evaluation:	27
Financial Management Issues	27
Procurement	27
AAP Regional Programmes	27
Communication Strategy	27
5.0 LESSONS LEARNT	28
Project Management	29
Stakeholder Engagement	29
Pilot Projects Influencing Policy	30
6.0 FINANCIAL STATUS AND UTILIZATION	30
Financial Overview	30

1.0 CONTEXT

Background

Various assessments undertaken on Ghana's vulnerability to the impacts of climate change indicate that climate change poses substantial economic and social threats. Scenarios and climate model projections so far indicate that the country is very vulnerable to climate variability and change, with projected temperature shifts, declines in rainfall, and shifts in the timing and intensity of weather events. There is clear evidence that the coastal zone, agriculture (including fisheries, cocoa, cereals, and root crops production), and water resource sectors as well as human health and rural livelihoods are affected by climate change and climate variability.

Objectives of AAP Ghana

In response to the aforementioned challenges, the AAP in Ghana sought to promote systemic change for a more integrated and holistic approach to climate change adaptation. This was to enable the country to better mainstream pro-poor and gender sensitive climate change adaptation approaches into its national and sub-national development processes, and to leverage additional adaptation funding and use these effectively.

The main objective of AAP Ghana was to ensure that Ghana has strengthened leadership skills, broadened and improved institutional capacity and financing mechanisms for addressing climate risks, and has demonstrated positive impacts in linking disaster risk reduction and climate change through the implementation of early warning systems.

Concrete measures and policy level support were linked through integration of disaster risk reduction and climate change adaptation in development.

Expected Outputs

- 1. Dynamic, long-term planning mechanisms to cope with the inherent uncertainties of climate change introduced.
- 2. Leadership and institutional frameworks to manage climate change risks and opportunities in an integrated manner at the local and national levels strengthened.
- 3. Climate-resilient policies and measures in priority sectors implemented.
- 4. Financing options to meet national adaptation costs expanded at the local, national, sub-regional and regional levels.
- 5. Knowledge on adjusting national development processes to fully incorporate climate change risks and opportunities generated and shared across all levels.

Project Implementation Framework

Executing Agency:	Ministry of Environment, Science and Technology	
Implementing	Environmental Protection Agency	
Agency:		
Project Partners:	Ghana Meteorological Agency (GMet), National Disaster Manageme	
	Organisation (NADMO), Ministry of Finance and Economic Planning	

	(MoFEP), National Development Planning Commission (NDPC), CARE International, Ghana Wildlife Society, Abantu for Development, University of Ghana, Ministry of Local Government and Rural Development, Ecobank Ghana Ltd., Agricultural Development Bank		
Technical and	UNDP Country Office, Accra; AAP Regional Office, Dakar		
Supervisory Support:			
Start Date:	October 2010		
End Date 1:	December 2012 (Technical Closure)		
End Date 2	February 2013 (Operational Closure)		

2.0 PROJECT RESULT SUMMARY

AAP Ghana engaged stakeholders at sub-national, national and international levels, ensuring a broader spectrum of stakeholders were involved in the achievement of tangible results. In addition to building capacities and influencing policy, AAP Ghana worked closely with five pilot districts to implement practical adaptation projects; a test case of translating policies into local actions.

It must be mentioned that the project faced some financial and procedural/administrative challenges during its implementation. These, notwithstanding, the PMU and its partners worked assiduously to implement project activities and had made very remarkable achievements. Though the PMU largely stacked to the project workplan, national priorities and dynamics led to some re-allocations and re-alignments of some activities. An example is re-allocation of funds to support the development of the national climate change policy (NCCP). This new development, which is normal in project implementation, affected the completion of some planned activities. The few uncompleted planned activities have been rolled into the Exit Strategy. In all, AAP has chalked very notable successes which are summarised below.

Results by Outputs

Output 1: Dynamic, long-term planning mechanisms to cope with the inherent uncertainties of climate change introduced.

- All 170 Districts were trained on mainstreaming Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) in 2011
- ❖ 32 new districts (created in addition to the 138 districts in 2010) were further trained on CCA and DRR using the Mainstreaming Tool in 2011 through workshops.
- Members of Parliament, Council of State, the Government's Economic Management Team, Regional Ministers, Regional Coordinating Directors, District Chief Executives, Chief Directors and Directors of Ministries, Departments and Agencies (MDAs) and Commissioners of the National Development Planning Commission were engaged

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¹ Ghana practices a decentralized system of governance. The country is divided into 10 Regions, each headed by a Regional Minister and administered by the Regional Coordination Council. The Regions are subdivided into Metropolises, Municipalities and Districts (Local Government Structures) which are headed by Metropolitan, Municipal and District Chief Executives respectively.

- through High Level Interactive Workshops to create awareness on climate change and deliberate on how they could support mainstreaming of CCA and DRR in their various areas of authority. In all, 160 participants were engaged and commitments made to facilitate the mainstreaming process at various levels.
- ❖ AAP supported the integration of climate change (CC) into the Functional Organisation Assessment Tool which is a prerequisite for budgetary allocations to District Assemblies development projects and programmes.
- ❖ AAP championed the incorporation of CCA and DRR into the Ghana Building Code.

Output 2: Leadership and institutional frameworks to manage climate change risks and opportunities in an integrated manner at the local and national levels strengthened.

- ❖ AAP supported 32 mentors and mentees (drawn from the public service, academia and civil society) to enhance their knowledge and skills through mentoring and coaching on climate change adaptation and disaster risk reduction and soft skills (such as facilitation).
- Training of disaster response personnel (70% of which were women) in all 10 regions of the country as well as in 15 districts in the 3 northern regions.
- 2 Committees and a volunteer group have been commissioned to oversee watershed management along Osubin and Akrom rivers in Begoro in the Eastern Region as part of the Leadership for Results Programme (LFRP) led by the Climate Change Unit of EPA. 500 Mahogany seedlings and raffia were planted and are being maintained by the community volunteers. Lessons learned from this programme will be useful in scaling up to other communities.

Output 3: Climate-resilient policies and measures in priority sectors implemented.

- ❖ AAP has supported the Ghana Meteorological Agency (GMet) to improve its frequency, volume, and quality of weather data by installing 8 Automated Weather Stations (AWS) and 1 High Speed Computer and provided training on early warning signs to build the capacity of GMet Staff to gather, monitor, and utilize weather data for improved weather forecasting, early warning, and future climate projections
- ❖ Flood and drought vulnerability of communities in all 5 AAP pilot districts have been mapped (using GPS and GIS). Safe havens were also identified and mapped and evacuation plans prepared for the flood-prone areas
- ❖ AAP established a Climate Change Community of Practice (CoP) comprised of experienced and young professionals and researchers who collect and analyze local climate data and use models for making future climate projections. They have been working in collaboration with the University of Cape Town Climate Systems Analysis Group (CSAG)
- Supported the development of the National Climate Change Policy (NCCP)

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Output 4: Financing options to meet national adaptation costs expanded at the local, national, sub-regional and regional levels.

❖ AAP supported 2 international workshops on climate change economics and finance for 58 Ghanaians and 53 International participants drawn from relevant institutions. These

- training workshops explored, in great detail, various climate change finance options (including modalities) as well as the economic analysis of various adaptation options
- Based on the aforementioned workshops and on case studies from other countries, recommendations were made for the establishment of a Functional Institutional Finance Mechanism for climate change in Ghana.

Output 5: Knowledge on adjusting national development processes to fully incorporate climate change risks and opportunities generated and shared across all levels

- AAP supported a study on indigenous knowledge on climate change and the subsequent preparation of an Indigenous Knowledge Atlas.
- ❖ A 19 series "Policy Advisory Series" document on climate change issues have been developed with the support of AAP and widely disseminated. The themes include
 - 1. Development Planning
 - 2. Agriculture
 - 3. Disaster Risk Reduction
 - 4. Coastal Zone and Resources
 - 5. Education
 - 6. Energy
 - 7. Forestry
 - 8. Health
 - 9. Human Settlement
 - 10. Tourism
 - 11. Transport
 - 12. Water Resources
 - 13. Technology
 - 14. Public Finance
 - 15. Private Finance
 - 16. Opportunities
 - 17. Indigenous Knowledge
 - 18. Gender
 - 19. Capacity Building
- ❖ AAP supported the development of a Guide for Mainstreaming Climate Change and Disaster Risk into national development policies and planning.
- ❖ AAP developed training manual on gender, climate change and disaster risk reduction.
- Drought and Flood Hazard Maps were developed for 5 AAP pilot districts
- Audio-visual materials were developed
 - 2 Audio visuals on climate change developed
 - > Documentary on local adaptation in Northern Ghana and Burkina Faso
- ❖ Posters and Pull-ups were created on High Level Awareness Raising Workshops
- Project Fact and Achievement sheets

Sisala East District:

- ✓ 225 Domestic Animals (103 goats and 122 sheep) distributed to 45 women groups in 9 communities as part of the alternative livelihood programme
- ✓ 2000 Mango seedlings successfully transplanted as part of the crop diversification programme. However, 400 seedlings got burnt in 2012 during the dry season in one of the communities.
- ✓ Undertook awareness creation through talk shows and radio discussions on climate change

Fanteakwa District:

- ✓ 16,000 Mahogany, teak and raffia seedlings transplanted along the Osubin River.
- ✓ 709 cockerels and 50 goats procured and supply for 15 communities under the Alternative Livelihood Phase.
- ✓ 10 water pumping machines purchased and installed for dry season vegetable farming

Keta District:

✓ Construction of 2 footbridges to improve access to farms, markets, schools, and livelihood for about 1500 persons living in the Suipe and Agorvinu communities in the Volta Region.

West Mamprusi District:

- ✓ Established nurseries to grow seedlings
- ✓ Purchased and installed 10 water pumps and agricultural equipment for dry season farming along the White Volta.

Aowin Suaman District:

- ✓ Established Environmental Clubs in 3 schools in the District as part of measures to sustain climate change knowledge in the district.
- ✓ Constructed 12 sheds (with 96 stalls) for the relocation of artisans from the flood-prone banks of the Desue River, and 3 sheds (with 64 stalls) for the relocation of market women to higher grounds
- ✓ Provided a mechanised borehole to supply water workers and clients at the new light industrial site.
- ✓ Procured and planted coconut seedlings for greening and commercial purposes at the old site where the artisans were relocated from.

Studies Undertaken Under AAP

1. Scoping and Impact Assessment Review for an Integrated Approach to Broadening Climate Change Adaptation into Sectoral Development.

The sectors reviewed under the study were:

- I. Natural Resource, Biodiversity and Land Use
- II. Transport Infrastructure
- III. Water Resources

- IV. Health
- V. Planning and Macro-economy
- VI. Gender and Vulnerability
- VII. Agriculture
- VIII. Coastal Zone
- IX. Disaster Risk Management
- 2. Recommendations for Functional Financial Institutional Mechanism for Climate Change in Ghana.
- 3. Assessment of Multi-Level Coordination Mechanisms for Climate Change and Sustainable Development in Ghana.
- 4. Mapping and Documenting Indigenous Knowledge in Climate Change Adaptation in Ghana.
- 5. Hazard and Vulnerability Mapping in the AAP Pilot Districts
- 6. Climate Scenario Studies in Northern Ghana

3.0 PERFORMANCE REVIEW

3.1 Progress Review

3.1.1 Overall progress towards Country Programme Action Plan Outcomes and Outputs

AAP Ghana on the whole made very significant progress towards its Country Programme Action Plan. Taking into account that some activities were reprioritized with 'support for the development of the National Climate Change Policy', the project achieved overall progress of 96.9% by 18th January 2013.

3.1.2 Subsection for each Outcome

Output 1: Dynamic, Long-Term Planning Mechanisms to Cope With The Inherent Uncertainties Of Climate Change Introduced			
Outcome	Key Milestones	Progress/	Remarks
	Attained	percentage of	
		Completion	
1.1.1 Identify critical	Key ministries	100%	Building of synergies,
national ministries	and institutions		partnerships and
and institutions to	identified.		institutional
target for an			collaborations. Some of
integrated approach			the key ministries
to broadening CC			identified and
coalition.			collaborated with
			included the Ministry of
			Finance and Economic
			Planning, Ministry of
			Local Government and
			Rural Development,

1.1.2 Support each prioritised institution to undertake a scoping and impact assessment study followed by a participatory awareness raising process (with gender-responsive approach)	 Studies undertaken Awareness raised on the potential impacts of climate change on the sectors, as well as possible adaptation options 	100%	Ministry of Food and Agriculture, Ghana Meteorological Agency, National Disaster Management Organization, to mention but a few. The extent to which the institutions are affected and their linkages were brought to the fore.
1.1.3 Initiate a systematic and ongoing process of high-level awareness raising and training events	 International and national consultant contracted to prepare awareness raising and training materials and events for high level participants Key selected political leadership (including Council of State, Economic Management Team, Members of Parliament, District Chief Executives) sensitised at national, regional and district levels. 	90%	This created an opportunity to build synergies and partnerships. High level workshops for all the regions carried out except for District Chief Executives and Regional Ministers of Volta and Eastern Regions.
1.2.1 Formulate capacity	Supported ongoing CSO	80%	Project was unable to conduct the

development interventions for key partner organisations to better integrate CCA and DRR into their development	Activities • Followed up training with PPME staff via collaboration with NDPC to		sensitisation programme for artisans and town and country planning Staff of Metro and Municipal Assemblies with
strategies	follow up training with MDAs • Worked with expert consultant to undertake dialogue with Institute of Architects, Surveyors and engineers on building designs, etc. • Following this dialogue, reviewed the Building Code and identified gaps in relation to CC and DRR		respect to CCA and DRR due to reallocation of fund based on national priorities.
1.2.2 Support the development of the legal and policy framework for prioritising early warning; and protocols for integrating where possible regional and cross-border warning systems		0%	Reallocation of resources in support of the National Climate Change Policy led to the cancellation of this activity. Activities planned under this included • Engage a consultant to identify and assess regional and cross border engagements and draft a legal and a policy framework • Organise a meeting with the stakeholders on the draft framework on the EWS

			 Meet with Parliamentary select groups such as Science and Environment to discuss framework Develop and submit a memo on legal and policy framework on EWS for the consideration of Cabinet
1.3.1 Undertake status quo assessment and gap analysis of key actions and proposals for integrating CCA into district development planning		100%	Training opportunities for the Budget Officers on incorporating CC and DRR in their budget.
1.3.2 Identify priority actions to be supported by the AAP for better integration of CCA and DRR at the district level		100%	The information supported institutions like the National Disaster Management Organisation (NADMO) in carrying out its mandate.
1.3.3 Allocate funding to relevant institutions and pilot districts to implement prioritised actions	• Lessons learnt document produced and shared with all districts in Ghana, demonstrating how mainstreaming CCA and DRR into development planning can have tangible results	100%	Encouraged sharing of good practices and experiences with CCA and DRR. Some of the pilot districts later requested for extra assistance but due to budgetary constraints at the latter part of the project, AAP could not offer such further financial support.

given funding to support CAA projets

OUTPUT 2: LEADERSHIP AND INSTITUTIONAL FRAMEWORKS TO MANAGE CLIMATE CHANGE RISKS AND OPPORTUNITIES IN AN INTEGRATED MANNER AT THE LOCAL AND NATIONAL LEVELS BUILT

NATIONAL LEVELS B		D	D I .
Outcome	Key Milestones	Progress/percentage	Remarks
	Attained	of Completion	
2.1.1 Assessment of existing multilevel inter-ministerial (national, regional and local) coordination mechanisms for CC / sustainable development, and develop proposals for different institutional options. Strengthen mechanisms.	mechanisms identified at the national, regional and local levels (including CSOs) Assessment of the identified coordination mechanisms for climate change and sustainable development conducted	70%	Reallocation of resources in support of the National Climate Change Policy led to the reduction in the scope of work under this activity. The following could not be undertaken: Conduct assessment at the national level. Organise meetings for relevant stakeholders such as CSOs, NDPC MEST etc. (using cross sectoral planning approach) Design training packages such as M & E, harmonisation and coordination
2.2.1 Design and conduct capacity development through learning in action (training with results) programmes at national, regional and local levels, with a focus on women's representation.	 Undertake a year-long mentoring and coaching initiative Assessment of the mentoring programme conducted 	90%	Mentors and mentees were offered training in CC and soft skills. There were opportunities to learn about one another's profession and to interact with each other. However, there was planned incentive package for the best

			mentee to attend but this could not come off due to the reallocation of funds in support of the National Climate Change Policy.
2.2.2 AAP Regional Specialists to conduct Leadership for Results Programme (LFR)	Supported the implementation of EPA LFR project with regards to: • Awareness creation • Restoration of riparian vegetation along two rivers • Creation of buffer	100%	This created income generating opportunities to land owners along the river basin. This served as a demonstration project which has the potential of being scaled up to other areas.
2.2.3 Leadership training for key	zone A training course for the Executive	50%	That of the Minister responsible for
leaders in Climate Change	Director of EPA was supported by AAP.		Environment could not come attend the training due to election season.

OUTPUT 3: CLIMATE-RESILIENT POLICIES AND MEASURES IMPLEMENTED IN PRIORITY SECTORS

Outcome	Key Milestones Attained	Progress/percentage of Completion	Remarks
3.1.1 Undertake inventory and gap analysis of EWS	Literature reviewed to indentify gaps	100%	This supported institutions like the Ghana Meteorological Agency (GMet) in carrying out their mandate.
3.1.2 Develop scope of activities under an AAP EWS programme	 Participatory meetings held during regional climate products workshop. 	100%	This created the opportunity to build synergies, partnerships and institutional collaborations.
3.2.1 Establish and support a climate	ToR developed and CoP	100%	This created the opportunity to build

science Community of Practice (CoP) in Ghana	 established Supported programme of activities over a 12 month period 		capacities, synergies, partnerships and institutional collaborations.
3.2.3 Develop climate hazard maps for Ghana and at a local level for the AAP Pilot Districts	 Developed and implementd a process for GIS based climate hazard mapping using climate modeling. Supplemented modeling information with community based participatory approaches in the AAP pilot districts. 	100%	Provided an opportunity to extend the hazard mapping to other districts of the country.
3.2.4 Procure, install and train staff at GMet on the use of a High Performance Computer (HPC) and Numerical Weather Prediction model	 Developed technical specification Procured model Installalled model Monitoring checks to ensure long term sustainability 	90%	The HPC has been procured and installed. The project could however not support the training of GMet staff on the HPC. This activity has been rolled into the exit strategy.
3.2.5 Support ongoing maintenance of Automated Weather Stations (AWS)	/	100%	8 AWS procured and installed. With the exception of the last quarter of 2012, the project supported the periodic monitoring of the AWS.
3.3.1 To develop and operationalize methodologies for communicating early warnings of flood and droughts in Ghana	Existing communications and dissemination practices in AAP pilot districts reviewed	50%	A team visited the pilot districts and came up with a report. TOR was prepared and consultant identified but the Community Information Centres could not be

		operationalized due to budget re-allocation in support of the National Climate Change Policy.
3.3.2 Test the effectiveness of the communication methodologies via an assessment of response capability	0%	Activity could not be carried out due to reallocation of funds in support of the National Climate Change Policy.

OUTPUT 4: FINANCING OPTIONS TO MEET NATIONAL ADAPTATION COSTS EXPANDED AT THE LOCAL, NATIONAL, SUB-REGIONAL AND REGIONAL LEVELS

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Outcome	Key Milestones	Progress/percentage	Remarks
	Attained	of Completion	
4.1.1 Develop a guide for a detailed economic analysis of climate change adaptation needs and inclusion of this within budgeting	 Held a regional AAP climate finance workshop, which addressed how to undertake economic analysis of climate change. Undertook economic analysis of climate change impacts on three priority sectors 	70%	Two regional AAP climate finance and economic analysis workshops were organised. The need for a checklist rather than a guide was identified by the Ghanaian participants. However, the project could not offer the financial support to develop the checklist. Recommendations were made to feed it into the functional financial mechanism.
4.1.2 Train		100%	At the regional
organisations to			workshop, Ghanaian
undertake detailed			participants from the
economic analysis of			agricultural and water
climate change			sectors were trained on
adaptation needs and			how to conduct
inclusion of this			detailed economic
within their			analysis.
budgeting processes			
4.2.1 To assist Ghana		20%	A stakeholder
to source more funds			consultation workshop
for adaptation			was organised to draw

			ideas on how to achieve the objective of this activity. However, no further consultancy work could be done due to reallocation of funds in support of the National Climate Change Policy.
4.2.2 Develop recommendations for functional financial institutional mechanism	 Held a regional AAP climate finance workshop, which introduced climate financing (combines with workshop under 4.1.1). Held a national workshop which explored potential climate finance mechanisms for Ghana in detail (combined with workshop under 4.2.1) Consultant developed recommendation s for financial mechanisms including strategy for long term funding 	100%	Recommendations for Functional Institutional Finance Mechanisms developed

Output 5: Knowledge on adjusting national development processes to fully incorporate climate change risks and opportunities generated and shared across all levels

Outcome	Key Milestones	3 -1	Remarks
	Attained	of Completion	
5.1.1 Consult with key	• Built upon	100%	This created the
stakeholders and	existing		opportunity to build
establish a national	institutional and		synergies, partnerships

knowledge platform for climate change	expert mapping of NGOs and others, and identified training and information technology needs		and institutional collaborations.
5.1.2 Prepare advocacy and knowledge sharing materials		100%	Policy Advisory Series on 19 themes, Atlas on Indigenous Knowledge, Fact Sheet and Achievement Sheets were prepared and distributed.
5.1.3 Design and implement national knowledge sharing materials	 Developed existing audiovisual materials, incorporating policy advice outputs, for example Produce documentaries 	100%	Documentary was used during workshops. TV audio-visual has been produced but the broadcast will be rolled over into the exit strategy.
Crosscutting issues			
Outcome	Key Milestones Attained	Progress/percentage of Completion	Remarks
Undertake study and make recommendations to ensure mainstreaming of gender issues in AAP	 Undertook gender lens review of AAP Undertook "watching brief" on gender issues 	100%	Provided a learning opportunity for the PMU in gender issues.
Overall Monitoring and Evaluation	 Appointed consultant to design 	100%	
	monitoring and evaluation methodology and implement this		

			completed by end of
			February 2013.
AAP Exit Strategy	• Contract a	100%	Report developed.
	consultant to		Implementation is yet
	develop the strategy		to commence.
	Organize stakeholder		
	workshop to		
	discuss the draft document		
	 Incorporate 		
	comments into		
	document by		
	consultant		
	 Present 		
	document to steering committee		
	members for		
	inputs and		
	endorsement		
	Finalize		
	document		
	•		

3.2 Implementation Strategy Review

3.2.1 Sustainability

As part of measures to ensure sustainability of the AAP, a permanent employee of the EPA was assigned to work full time and closely with the PMU. The intention was to enhance capacity and ensure institutional memory even after the project had elapsed.

In addition, the AAP in consultation with the key stakeholders has prepared an Exit/Sustainability Plan. This plan itemizes, on output basis, what AAP has achieved, what is outstanding and recommendations thereof. Broad stakeholder consultations have also been held on the exit strategy resulting in an implementation schedule/workplan. The basic objective of the exit strategy is to solicit buy-in from the major stakeholders so that the recommendations that concern or fall within the domain of any public organization would be mainstreamed or assimilated into the normal work of the organization.

The exit strategy will not be left alone. The AAP would also prepare a Monitoring and Evaluation Plan to assist the coordination and implementation of the exit strategy hopefully for the next three years.

Attempts were also made to train a crop of young mentees and mentors selected from over 15 different organizations, with a basic objective to not only to build capacity in the area of climate change, but also to ensure that they would assist in the implementation of AAP. Another intended objective of the mentoring programme is to sustain climate change knowledge in the targeted institutions.

3.2.2 Participatory/Consultative Process

The AAP used a team and consultative process in the implementation of its activities. This therefore resulted in series of meetings, workshops and consultations. The implementation of the AAP commenced with a Scenario Mapping exercise which resulted in the following outputs;

- Current scenario of stakeholder initiatives and mechanisms mapped by resource persons.
- Common elements linked and gaps in overall national context identified.
- Draft Contact lists of key potential consultants, institutions and identified persons.
- A detailed and realistic revised work plan.

Following the Scenario Mapping workshop was a National Stakeholder Implementation Design workshop also aimed at (a) sensitising a broader set of the stakeholders including women's groups on Climate Change Adaptation issues, considered ongoing and other new initiatives on climate change adaptation and their gender impacts, (b) finalised common areas/themes of work, roles, responsibilities levels of participation of women and men and mutual accountability; (c) sought concurrence and developed common plans to facilitate the implementation of the overall project utilizing gender analysis as one of the tools.

As a result of the above two workshops and in addition to the numerous public sector agencies, AAP partnered with public organisations and private institutions including civil society organizations such as Care International, Ghana Wildlife Society, Regional Institute for Population Studies, Agricultural Development Bank, Econbank Ghana and Abantu for Development (a gender based NGO) in the discharge of her duties.

Indeed several of the initiatives such as Mentoring and Coaching, climate financing commenced with intensive brainstorming discussions with carefully selected stakeholders. Following on from there, AAP has worked with more than 15 organisations selected from government, private sector and NGOs.

The consultation process also included 5 pilot districts in Ghana and the implementation of some of the activities included consultation and participation of regional and district leadership throughout the country.

3.2.3 Quality of Partnerships

The quality of the partnerships could be rated very high. AAP did not implement all activities by itself. In the quest to reduce cost, for example, some of the activities were split among the partners. The roles played by key partners are summarised below.

Leadership and Institutions

Ministry of Environment Science and Technology: As the Executing Agency of AAP in

Ghana, MEST provided higher level support to the project implementation. For example, the involvement of the Ministry (particularly the signing of invitation letters for the High Level workshops by the Minister) resulted in very high turn-out. The Ministry also led the development of the National Climate Change Policy.

Environmental Protection Agency: As the Implementing Agency of AAP in Ghana, within the National Execution modality (NEX) EPA led implementation of the project. Upon the appointment from MEST, EPA's Executive Director chaired the Steering Committee, which met quarterly to review progress and implementation of the project, and solicit guidance from other partners as relevant. Furthermore, , EPA seconded a staff to provide technical support to the PMU. In order to ensure sustainability and maximum benefits to be derived from AAP to climate change adaptation efforts in Ghana, EPA also allocated funds from its own budget to co-finance, or add on components to, AAP activities. For example, during the high level workshop on Climate Change, EPA co-financed about a third of the total cost (approximately 170,000 Ghana Cedis) in order to invite higher level stakeholders. This helped greatly in delivery of major outputs.

National Disaster Management Organisation: NADMO was a member of the Steering committee, as well as championed the hazard mapping in AAP Pilot Districts. Their technical expertise was very instrumental in achieving this output. Young professional staff within NADMO participated in the Mentoring and Coaching initiative as well as the Community of Practice initiatives, therefore, having various levels of members of the organization involved in the AAP projects.

UNDP: UNDP provided implementation oversight to ensure project's financial and technical quality. UNDP provided formal training sessions regarding UNDP policies and procedures regarding National Implementation guidelines and financial management during the inception phase as in Q1 2012 in Elmina along with other IPs. Furthermore, UNDP staff provided support to PMU in communicating and clarifying UNDP policies and procedures on need base. UNDP also provided quality assurance support by reviewing ToR as well as final deliverables from consultancies. The UNDP provided technical support to the PMU to ensure quality delivery. UNDP was also the disbursing Agency on behalf of the Government of Japan.

Ghana Meteorological Agency (GMet): GMet was a member of the Steering Committee. They were also involved in implementing activities under the Early Warning Systems (Output 3). Lack of a technical person in the PMU with expertise in EWS initially hampered delivery of this output. The Data Analyst in Dakar and Climate Change Analyst in UNDP Ghana however stepped in to push the delivery.

The Climate Change Community of Practice (CoP) was a good platform, providing an opportunity for young researchers and professionals to network and exchange information. Young professional staff within GMet participated in the Mentoring and Coaching initiative as well as the Community of Practice initiatives, therefore, having various levels of members of the organization involved in the AAP projects.

District Assemblies: The Assemblies led the implementation of pilot projects. This was relevant for ownership and buy-in by the communities. Representatives of the districts where the pilot projects were implemented were members of the Mentoring and Coaching initiative.

3.2.4 National Ownership

The implementation of the activities right from the outset was done in close collaboration with the organisations that have legal mandate to pursue similar activities. Government of Ghana demonstrated its commitment to own and sustain the project by cooperating fully with the project implementing agency.,

3.3 Management Effectiveness Review

A unified management structure was in place whereby a steering committee composed of the main stakeholders to provide strategic directions on a quarterly basis. The day-to-day management and supervision of the project was done by the project management unit (PMU) located in the Environmental Protection Agency (EPA). The PMU consisted of a Project Manager and 4 other project staff. The UNDP country office, Accra was responsible for supervising the activities of the PMU and also making approvals for payment requests regarding the implementation of the outputs of the project. The UNDP was also to ensure quality and exercise fiduciary responsibility.

The AAP Secretariat in Dakar, Senegal also provided the overarching direction to all country project offices. There was total collaboration among the partners in the project implementation. This section reviews the M&E systems of the project, resource allocation, and timely delivery of output and cost-effectiveness of inputs used.

3.3.1 Monitoring and Evaluation

Ideally, the project should have kick-started with a well developed M&E plan with clear indicators to guide the realization of the outputs. This was not the case for AAP Ghana. The project started before the overall M&E plan was developed. However, the PMU had its own monitoring system in place based on the activities implemented with tracked indicators before the comprehensive M&E plan was commissioned. For instance, the design of the pilot projects in the 5 districts made provision for effective monitoring. The pilot districts embarked on regular monitoring based on set indicators to ensure that the objectives of the various projects were achieved. The PMU also embarked on a number of monitoring visits to the districts during the project implementation phase.

The following are some observations the PMU made regarding M&E of the AAP implementation;

- i. one of the pilot districts did not have any systematic and comprehensive monitoring system in place
- ii. although some pilot project have monitoring plans in place, there were not very clear indicators to track results. An example was the awareness creation component of the project in almost all the project pilot districts.
- iii. reporting from the districts to the project management office in Accra was not as regular as was expected. The PMU could have bridged this gap with regular monitoring visits to the districts. However, the widely-spaced nature of the projects, coupled with inadequate funds for M&E allowed for only few occasional monitoring by the PMU.

3.3.2 Timely Delivery of Output

The project had in all 5 outputs with set out activities. In general the outputs of the project were delivered on time as indicated in the project workplan. There were few instances where some activities delayed due to fact that the vetting process of ToRs and consultancy deliverables to meet UNDP policies and procedures required substantial inputs and time from both the PMU and UNDP sides, therefore, in a few instances, this caused delay in the implementation. The direct payment system of the UNDP used in disbursing the project funds in some instances delayed delivery.

3.3.2 Resource Allocation

Resources from the PMU's point of view comprises of human resources (project staff), material resources (logistics) and financial resources.

Project staff: the project started with only 2 staff at the PMU. This affected delivery in the early phase of the project. The secondment of one Officer by the EPA and the recruitment of two Technical Assistants by the project enhanced delivery. However, looking at the volume of work vis-a-vis the number of staff directly on the project put a lot of stress on the staff at the PMU. Realistically, an officer each should have been assigned to each of the five outputs to ensure effective delivery.

Material resources: these included office furniture, vehicles, computers, consumables, etc. These materials were provided sufficiently throughout the project implementation phase. These resources were used with maximum care by the PMU to reduce avoidable damages, wear and tear.

Financial resource allocations and utilization: Under the direct payment modality of the national execution, UNDP country office disbursed funds directly to the service providers. In accordance with the management structure, disbursement were made according to quarterly plans. Budget expectations were in most instances discussed and resolved a the Steering committee level. This understanding facilitated, to a large extent, judicious allocations and utilization of the project funds. However, the decision to or not approve of payments after Steering Committee's recommendations rested with the UNDP.

3.3.4 Cost-effective use of inputs: inputs were effectively applied during the project implementation.

4.0 IMPLEMENTATION ISSUES

Staffing and Capacity Issues:

Only two persons-(Project Manager and Project Assistant) were engaged by AAP Ghana in the beginning as was stated in the previous section. This delayed delivery of outputs. An EPA employee was however seconded to the Project about a year later. Having discussed the need to employ more staff, it took about a year to engage 2 additional technical Assistants in January 2012.

Monitoring & Evaluation:

Detailed M&E methodology/plan and schedule was not set up prior to the implementation of activities, including workshops, pilot district activities, etc., therefore, making it difficult for the PMU to understand what the participants learned and how they are acting upon the newly gained information. Detailed M&E methodology/plan and schedule must be set up at the project initiation, well before the implementation of the activity, so that the TOR of the activity can have clear monitoring and follow up actions as well as a methodology of how to gather and assess data.

Financial Management Issues

UNDP CO provided PMU with financial reports generated in Atlas (Project Budget Balance, etc.) on regular bases (monthly) and upon request. The Project Management Unit did not have access to the Altas and could therefore not budget with the actual project account balance. Additionally, the PMU was not privy to some expenditure until sometime after they had been made. This resulted in a very difficult situation of the PMU having to withdraw/reduce contracts that had been signed already owing to the fact that the project balance was in deficit as a result of expenditures made from the project account by UNDP without the knowledge of the PMU.

Procurement

Both government and UNDP procurement were utilized for AAP project implementation. Both procurement Processes were sometimes complex. Even though in some instances the PMU endeavoured to start activities early, the process sometimes took so long and did affect the timing of delivery.

AAP Regional Programmes

In the case of the implementation of the Leadership for Results (LFR), at the outset, the consultant from AAP Regional Office contacted UNDP and did all arrangements regarding the training without involving PMU. However, it would have been more ideal if AAP/PMU had been deeply involved. However, the AAP/PMU team was confronted with the reality of assisting in the monitoring and sourcing funds to assist in some of the breakthrough projects. The AAP supported the EPA LFR breakthrough project.

Communication Strategy

Communication Strategy should have been done right at the outset of the project. Due to the timing andother unforeseen challenges, an effective communication strategy was not available for the AAP project team to utilize.

Other key challenges: Many of the factors that impinged on the progress of project implementation are associated with design and management aspects. Key challenges are enumerated below:

1. The lack of high level buy-in and ownership from the project outset was a limiting factor in engaging with other agencies.

- 2. The project design process was undertaken in a very rushed fashion owing to time limitations for the AAP. As a result, consultation was limited resulting in the poor levels of ownership from some key stakeholders and weak communications and coordination.
- 3. Lengthy delays in recruiting key staff, which resulted in longer than usual implementation delays.
- 4. The PMU had difficulties understanding what UNDP considers a result. This resulted in a lack of evidence able to demonstrate empirically and substantiate the different project outputs. UNDP's role as fund manager and its associated fiduciary responsibility was also not quite understood which resulted in unnecessary transaction costs.5. The limited understanding of government and UN procurement procedures resulted in preventable implementation delays.
- 6. There were too many individual projects being implemented which placed excessive demands on available expertise and resources, resulting in delayed delivery and low impact in some cases.
- 7. UNDP had procurement challenges in the beginning, and therefore shifted midway to government procurement process

5.0 LESSONS LEARNT

The key lessons are summarized below:

- 1. The recognition that without high level leadership and commitment programmes as complex and challenging as AAP will not gain the traction they need to achieve transformational change outcomes. A pre-condition for funding should be that governments identify and enlist the services of a "champion" that has the authority and mandate to direct government agencies throughout implementation.
- 2. In some cases especially in the pilot districts, the activities designed far exceeded the technical capacity for them to be delivered effectively. A major lesson has been that a thorough capacity assessment must be undertaken parallel to the design process and that strategies to address gaps must be included within the first year of delivery.3. It was essential to specify the mandate of the Steering Committee, coupled with a clear definition of individual roles and responsibilities. Having a regular schedule of meetings would enhance the project management process and ensure alignment of project activities and deliverables with government priorities and other projects.
- 4. There was no policy component to EWS despite the initial plan (the EWS component focused more on implementation rather than institutional building and policy development). Additionally, the cross-border EWS plan was ambitious and was not accomplished; trying to tackle such a broad spectrum of activities within EWS with such little time and money was ambitious the project could have been focused entirely on EWS if the purpose of AAP in Ghana was to establish a functioning EWS by the end of the project
- 5. High Level Workshops: innovative methodologies to learning, as opposed to the traditional powerpoint presentation, attracted the attention and active engagement of high level participants. Main reason why we had many participants was due to the fact that the Ministry was involved i.e. letter of invitation was sent out with Minister's signature. In addition, the PMU did a lot of follow up by phone, in addition to sending out the letters.

6. Training on finance and economic analysis of climate change: Activities should have focused more on methodology development and awareness raising rather than implementing the establishment of a functional financial mechanism and/or economic analysis of climate change in Ghana. Better coordination and discussion between AAP Ghana team and UNDP CO, Regional Office, and HQ required when organizing international workshops

Other key lessons are presented in the table below:

Project Management

The project manager reports to UNDPs project officer and can as such rely on UNDP's financial management capacity. UNDP's role as capacity development and technical agency needs to be utilized more pro-actively by PMU so as to constantly improve project management practices. PMU needs to have good tracking of finances and the management through atlas. Either PMU gets access to ATLAS, or by establishing, their own accounting process. Regularly updating project budgets against ATLAS needs to take place and this could be done in conjunction with the UNDP CO.

There needs to be clear understanding of the relationship and requirements of both UNDP and government procurement rules by the government partners, PMU, and SC.

Project management arrangements should be established up front (roles of PMU, UNDP CO, steering committee, technical committee, implementing partner, etc).

(IRTSC) Reporting templates should be consistent and shouldn't change on a quarterly basis.

Involving the PM in the PMU staff recruitment is important to have an effective PMU

Financial arrangements should be clearly defined in Project Documents including staff salary plans or MoUs

Stakeholder Engagement

Engaging stakeholders from the TOR development phase would have ensured greater effectiveness. For example, in Namibia, they shared TOR of work packages (activities) from the beginning with relevant stakeholders (TOR input sessions), then shared the outputs (i.e. it is not enough to just share outputs/validation, but engage them in the TOR sharing exercise)

Conducting a scenario mapping of key experts, knowledge, and skills were effective in getting key stakeholders engaged in the project

Establishing a technical committee in addition to the steering committee would have enhanced the quality assurance of the deliverables

Formal stakeholder engagement platforms for relevant sectors could have enhanced the coordination and quality of activities

Clear coordination with the donor/Embassy of Japan should be established early on between the PMU and the UNDP CO.

Pilot Projects Influencing Policy

Important lessons from the implementation of pilot projects are that:

- 1. Ad hoc small-scale adaptation projects create very little long-term benefit unless they are designed to influence a specific policy agenda and there is an associated commitment from government to replicate and expand the initiatives based on the results that emerge from pilots.
- 2. Communities must be engaged in the design and implementation of adaptation pilots so that ownership and commitment to sustain the results can be assured.

6.0 FINANCIAL STATUS AND UTILIZATION

Financial Summary

With funding to the sum of US\$2,754,000.00 from the Japanese Government, AAP Expenditure for the years 2010 to 2013 are US\$658,787.13; US\$825,180.93; US\$1,183,857.43 and US\$1,492.89 respectively. Government of Ghana also co-funded some of the activities of the project, especially the Steering Committee (SC) meetings and high level interactions. For instance, the Environmental Protection Agency co-funded the high level and SC activities to the tune of about US\$ 100,000.00. There were other in-kind services such as office space and utilities that the EPA provided for the project. Below are summaries of how the donor grant from Japan was utilized during the project implementation period;

Financial Overview

SUMMARY EXPENDITURE:	
CONSULTANTS-LOCAL	41,286.11
SERVICE CONTRACT RELATED SALARY COST	22,015.63
RENT-MEETING ROOMS	19,145.43
DAILY SUBSISTENCE ALLOW-LOCAL	19,737.59
OTHER RELATED TRAVEL COST (FUEL,	
COMMUNICA TION, VEH. MAINT'CE, TERMINALS ETC)	603.48
SERVICE CONTRACT - COMPANIES	7,826.44
TRANSPORTATION EQUIPMENT	62,925.35
FURNITURE	3,984.61
ACQUSITION OF COMMUNICATION EPUIP	12,253.52
STATIONERY & OTHER OFFICE SUPPLIES	2,924.55
GRANT TO INSTIT & OTHER BENEF	152,125.83
MACHINERY AND EQUIPMENT	202,318.27
CONNECTIVITY CHARGES	351.41

ACQUIS OF COMPUTER HARDWARE	56,159.15
INFORM TECHNOLOGY SUPPLIES	306.34
AUDIO VISUAL AND PRINTNG COST	25,359.27
REIMB TO UNDP FOR SUPP SRVS	29,464.15
TOTAL	658,787.13

SUMMARY EXPENDITURE:	
SALARIES - IP STAFF	72,103.05
CONSULTANTS - INTERNATIONAL	7,818.37
CONSULTANTS-LOCAL	87,916.51
SERVICE CONTRACT INDIVIDUALS RELATED SALARY COST	42,139.74
UNV RELATED SALARY COST	30,686.81
AIRTICKET - INTERNATIONAL	75,347.62
AIRTICKET - LOCAL	706.95
DAILY SUBSISTENCE ALLOW-INTL	13,200.74
DAILY SUBSISTENCE ALLOW-LOCAL	94,885.59
OTHER RELATED TRAVEL COST (FUEL,	
COMMUNICA TION. VEH. MAINT'CE. TERMINALS ETC)	20.688.92
SERVICE CONTRACT - COMPANIES	35,865.75
COMMUNICA TION	1,716.29
INFORMATION TECHNOLOGY EQUIP & SUPP	129.50
RENTAL AND MAINTENANCE OF OTHER EQUIPMENTS	403.85
AUDIO VISUAL AND PRINTNG COST	38,635.71
RENT-MEETING ROOMS	68,367.29
ST ATIONERY & OTHER OFFICE SUPPLIES	4,749.44
GRANT TO INSTIT & OTHER BENEF	140,000.00
MACHINERY AND EQUIPMENT	7,565.79
CONNECTIVITY CHARGES	757.68
ACQUIS OF COMPUTER HARDWARE	5,495.86
AUDIT FEES	6,325.00
SUNDRY	8,415.60
REIMB TO UNDP FOR SUPP SRVS	61,258.87
TOTAL	825,180.93

SUMMARY EXPENDITURE:	
SALARY RELATED COST - IP	134,356.11
CONSULTANTS - INTERNATIONAL	35,429.35
CONSULTANTS-LOCAL	173,788.46
SERVICE CONTRACT RELATED SALARY COST	50,946.29
UNV RELATED SALARY COST	37,069.65
AIRTICKET - INTERNATIONAL	37,399.66
AIRTICKET - LOCAL	4,628.49
DAILY SUBSISTENCE ALLOW-INTL	13,601.00
DAILY SUBSISTENCE ALLOW-LOCAL	175,475.59
OTHER RELATED TRAVEL COST (FUEL, COMMUNICATION,	
VEH. MAINT'CE. TERMINALS ETC)	7.618.62
SERVICE CONTRACT - COMPANIES	105,897.44
PURCHASE OF EQUIPMENT AND FURNITURE	86,685.38
MATERIALS AND GOODS	9,805.07
COMMUNICATION	3,610.34
SUPPLIES	6,837.74
GRANT	15,000.00
INFORMATION TECHNOLOGY EQUIPMENT	53,228.10
RENT-MEETING ROOMS	109,019.14
RENTAL AND MAINTENANCE - PREMISES	6,008.56
RENTAL AND MAINTENANCE OF OTHER EQUIPMENTS	65,022.66
PROFESSIONAL SERVICES	6,388.89
AUDIO VISUAL AND PRINTNG COST	40,948.40
MISCELLANEOUS	51.41
REALIZED GAIN/LOSS	5,041.08
TOTAL	1,183,857.43

SUMMARY EXPENDITURE:	
SALARY RELATED COST	4,099.01
DAILY SUBSISTENCE ALLOW-LOCAL	1,453.54
RENT-MEETING ROOMS	4,486.58
MATERIALS AND GOODS (OPERATION)	408.60
PURCHASE OF EQUIPMENT	40,949.12
TOTAL	51,396.85