CLIMATE AND HYDROLOGICAL MODELLING

CSIR WATER RESEARCH INSTITUTE



Who are vou?

My name is Barnabas Akurigo Amisigo and I am a hydrologist with a government agency, the CSIR Water Research Institute. CSIR stands for the Council for Scientific and Industrial Research.

How did you come to be involved with Tema Port and this project?

I am involved in climate modelling, hydrological modelling, and work with Professor Appeaning Addo on coastal modelling through the DECCMA project. Through him I heard about the SMART ports project, the Sustainable Ports.

This was a little new to me, as I am not used to ports. It is an interesting new development, involving systems thinking and modelling; not just looking at what they do in the port itself, but also linking to the upstream aspects both biophysically and socially.

What do you think of the idea of Sustainable Ports?

The concept of sustainable ports means not treating the port as an isolated entity, but taking the concerns and dreams of various stakeholders into account. So, people who are not normally associated with ports, can help to support the port to grow. I think it is a very good idea. In fact it brings to mind my hydrological modelling where I take not only the physical processes and environment into

account, but also the livelihoods and concerns of people living in the catchment. The systems approach of the sustainable ports projects resonates very well with me.

How does the Sustainable Ports project differ from a more traditional view?

This Sustainable Ports approach brings into play a number of components: the ecosystem, economics and cultural issues. It links people that are located away from the port itself. This is quite new for me. I am used to just thinking of the catchment. It is an integrated way of looking at various interests and identifying them up-front – not when the port construction is finished and problems come. From the outset, you are looking at compatible and non-compatible interests and trying to marry them.

What is your particular learning?

My learning point is how this port is going to link up with upstream issues. So, connecting the issues of the lagoons in the area with their catchments. Are we just going to tick a box - as in: we have a lagoon here that will be impacted by the port, and an eye must be kept on it. Or are we really going to look at the catchment, and also how the lagoon affects the port and the port the lagoon?

What are the next steps?

It's important to link up with people in this project: the port developers and the scientists with similar concerns to mine, both Dutch and Ghanaian. We need to follow this into the future, monitoring the impacts of the port on the ecosystems and the ecosystems on the port. We need to measure the dynamic interactions over time, expressing our expectations and comparing them with the data from monitoring.

