



Infrastructure Planning and Management Social Environmental Risk in Infrastructure Part 1

Okay so the point of today's class is to look at another set of risk so we have looked at construction risks, economic risks, political risks and today we want to look at social and environmental risk so we are going to take two project neither of them happen to be in India and sort of see what are the kinds of social risks that come up, what do companies tried to do, what could you do those kind of exit, so the two projects are BUJAGALI dam in Uganda and CONOCOPHOLLIPS, now which is a large oil company during some oil exploration in Ecuador alright, so group 3 and groups 6 will present so I will ask group 3 to present BUJAGALI whose coming up from group 3.


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International Rivers Network and Bujagali Dam Project



GROUP - 3
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BACKGROUND



• Political Scenario

- Gained independence from British in 1962
- Major General Idi Amin seized power in 1971 after many military coups
- During his 8-year reign, around 3lac Ugandan were killed
- National Resistance Army seized control in 1986 and Yoweri Museveni was appointed as the President



• Economic Scenario

- Museveni privatised many state-owned companies
- GDP fell from 9.2% ('93-'99) to 2.6% ('99-'01)
- Lack of affordable power reduced GDP by 2%
- Domestic power demand was growing at 7% p.a.

Countries	Consumption per capita (KWh)
Uganda	90
Sub Saharan Africa	124
Developed nations	15000




Now so we will be presenting about the BUJAGALI dam project and the influence of IRN or International Rivers Network conserve project and to start with the political scenario the political stability of Uganda was not as rigid as it seems like also they gained Independence from British in 1962 after some ministry coups and there was an everything major general Idi Amin actually seen the power in 1971 and during his eight years reign he has killer around three lakhs in Uganda's due to some under there and later Mr. MUSEVENI who is also the President of Uganda now it is a he was Major of the National Institute Army.

And he is the control 1986 and from that time is actually continuous as a President of Uganda and talking about the economic scenario their once he allotted as the President he actually privatized mini state-owned companies the GDP was like around 9.2% which was very high compared to South African Nations of that time I like from 93 to 99 but it actually felt to 2.6% from 99 to 2001 and they thought that the lack of the affordable power was the reason for this and they MUSEVENI taught about having some power project to provide the people and affordable power.

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BUJAGALI DAM PROJECT



- For poverty alleviation, Museveni planned to build 6 hydroelectric projects in Nile
- He came into agreement with AES corporation & Madhvani group, forming AESNP
- Bujagali fall was chosen to build the dam

Location	Power Generation	Environmental and social costs
Kalagala	High	High
Bujagali	Medium	Medium
Karuma	Low	Low

- Estimated project cost: 582million USD
 - 200MW power plant
 - 100km long transmission line connecting national grid
- World Bank offered help and after evaluating options like geothermal plant, they agreed with AES, without public explanation, to proceed with hydroelectric plant.
- AES expected a ROR of 16% - 20%.




So that they can raise some economy also for the poverty alleviation and also to build the Hydro project plan he actually meet many companies in US and European etcetera and only one company nodded for their call and to that was AES cooperation and their combined with the MADHVANI group which is a lockless company in Uganda and formed a company called for consortium called AES NP or AES Nile power plant project they had three options to have a dam somewhere one was KALAGALA and BUJAGALI and KARUMA and as indicator the table if it using like KALAGALA first there is hypertension power generation but the environmental cause should be very high and if you go for the KARUMA the power generation will be low but the environmental cause will also be low.

So BUJAGALI was somewhere in moderate region so they went for that BUJAGALI location and the overall project cost estimated to be 582 million dollar and they were propose to have it 200 megawatt power plant and a hundred kilometer long transmission line connecting the national grid like discuss in all the case studies, World Bank again offered help for this project also and they had actually weld various options like it was plenty of geothermal energy also present in Uganda but they taught like that Uganda does not have that technological feasibility something to exploit in very reason manner this geothermal energy so they went to the hydroelectric power project itself and this company actually expected the rate of return of 16 to 20% from that project.


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FINANCING PROJECT



- Ugandan Parliament and AES signed PPA after 11 months of debate
- UEB and AESNP signed contract for 30year BOOT project
 - AESNP will construct and operate the power plant
 - UEB manages the transmission lines
- Payment terms
 - UEB will pay AESNP a fixed monthly capacity payment
 - A variable capacity payment will be paid to cover debt service, maintenance, and a target return of 18% on equity
- Financing terms:

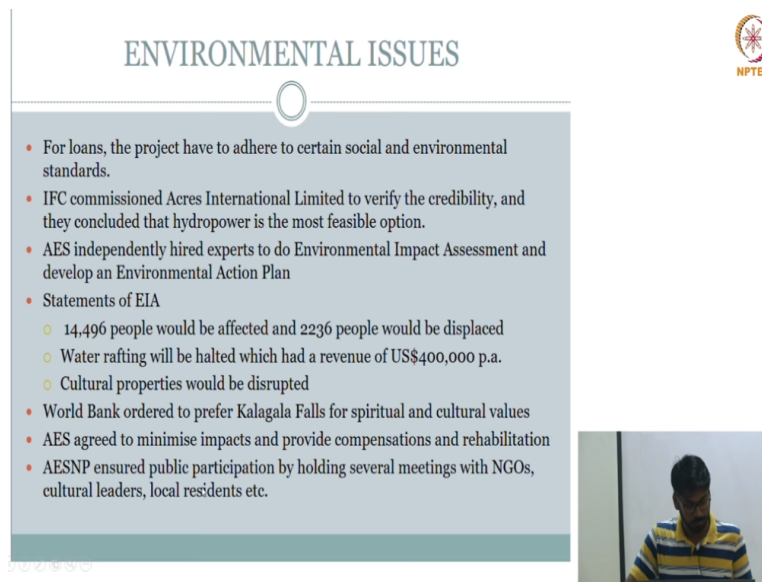
AES provides equity	115 million USD
Pre-power sale to UEB- equity	3 million USD
AESNP- debt financing	464million USD
IDA – debt financing	349million USD
IFC loan, AfDB loan	60 and 55million USD
- Export Credit Agencies of US\$200m were later withdrawn due to risks in repayment but World Bank guaranteed another US\$250m



So after that I want to some debate with their Parliament they both days and the Ugandan parliament they agreed sign a power purchase agreement and they have collaborated with Ugandan energy board that is UEB and at 30 year BOOT project was plant in that plan is AESNP will actually construct an operator the power plant and the UEB has to manage the transmission lines so the payment aim was like a UEB here the risk allocation was actually with more risk was allocated with UEB only like AESNP was saved a bit like they will any way get a fixed monthly capacity payment from UEB and the variable capacity will also be paid monthly which will cover the depth service.

Maintenance and they had target around a 18 percent on equity that they put on around 120 million dollars at their equity so there target return was 18 percent on that per annum and this for the financing term like they had to raise about 464 million US dollars and the rest will be put up by the equities from AES and the pre power sale and International Financial Corporation, African development bank and World bank had agreed to raise the rest of 464 million US dollars and they said that they will provide the loan but only if you other to certain social and elemental standard.

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The slide is titled "ENVIRONMENTAL ISSUES" and features the NPTEL logo in the top right corner. The main content is a list of bullet points detailing environmental concerns and actions related to a project. A small video inset in the bottom right shows a man in a striped shirt.


- For loans, the project have to adhere to certain social and environmental standards.
- IFC commissioned Acres International Limited to verify the credibility, and they concluded that hydropower is the most feasible option.
- AES independently hired experts to do Environmental Impact Assessment and develop an Environmental Action Plan
- Statements of EIA
 - 14,496 people would be affected and 2236 people would be displaced
 - Water rafting will be halted which had a revenue of US\$400,000 p.a.
 - Cultural properties would be disrupted
- World Bank ordered to prefer Kalagala Falls for spiritual and cultural values
- AES agreed to minimise impacts and provide compensations and rehabilitation
- AESNP ensured public participation by holding several meetings with NGOs, cultural leaders, local residents etc.

So what they done that International Financial Corporation actually appointed a Canadian Communical acres International Limited to actually verify that if the hydrolytic profile is most feasible option there and they concluded that it is the most feasible option and AES developed the employment action plan and environment impact assessment of the region by hiring some experts and the EIA actually is stated that around 2000 people will be displayed that the sum of 15000 peoples will be affected by this project and the main tourism activities like water rafting and which actually had the revenue of like 4 lac US Dollars per annum and or cultural properties like the grade sides everything we will have to be displaced from there.

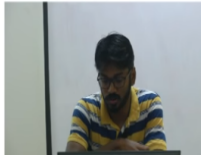
So they develop an exhaustive environmental action plan they agreed to minimize the impacts and also to order to the environmental standards that he has proposed World Bank also ordered to either to preserve KALAGALA falls also BUJAGALI falls also the national biodiversity and had said like we will prefer KALAGALA falls for this preserving the spiritual cultural value on the also promote the sustainability of the region and then came the opposition from the NGO's and various cultural leaders, local residents etcetera,

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CAMPAIGNS & ROLE OF IRN



- Save Bujagali Crusaders (SBC) & National Association of Professional Environmentalists (NAPE) persuaded World Bank to drop the project
- Claims:
 - People are too poor to even pay the tariffs.
 - Would affect local communities and increase diseases like malaria
 - Alternative options like improving existing transmission lines to be checked
 - Political corruptions and lack of open bidding
- IRN's issues:
 - Reviewed that the project was not complying with guidelines on many grounds
 - IFC's report contained many short fallings and Dismissal of geothermal option wasn't justified
 - Concerns: Project cost, options assessment, affordability and decision making process
 - Wanted to delay Multilateral Investment Guarantee Agency (MIGA) signing with World Bank
 - They demanded a copy of PPA which was kept confidential at first
 - Received a leaked copy of Inspection Panel report which stated: that the project didn't comply with certain policies
 - Museveni and AES turned against NGOs action to collect information



And two of them main campaigns NGO's which oppose the project was saved BUJAGALI Crusaders and National Association of Professional Environmentalists and they claim that appear under poverty but the people are actually even poor to pay the tariff that they have to pay for the electricity and this food affect the local communities who are actually driving on the availability of this water river which is flowing through their and this at like they have not trying to improve the existing transmission lines like they could have improve the transmission lines they did not have to go for a project like this which involve high cost of investment and Ugandan government was actually again on put some political corruptions and there was in the competitive bidding.

Also like they were actually AES they contacted AES and they agreed and they came into an agreement there was in the open bidding for that and the IRN or (())(07:31) the other NGO's which actually came to this role and they also posted and their main concern for the project course like is it feasible and she said the options were in assed like a whether to go for geothermal or hydroelectric plant there was in the justifying assessment of the options and affordability of the people to pay for the tariff and also decision making process there was no competitive bidding and IFC actually proposal report which contain many short falling and again the geothermal option was in justified and IRN told that this is not the way to actually proposed plan and we should actually go through it and review if the project is right or not and like they had one option whether to get the I mean there for the project they had actually the World bank

actually had to agree for a multilateral investment guarantee agency and once it is signed then there is not much option available for IRN to delay the project or put an end to the project.

So they wanted to either delay the project so that they can raise some issues against but they did not have any credible data sources to say that yes this project is against it and they demand the copy of property agreement also but it actually kept confidential there was not transparency in this case and but somehow they received league copy of instruction panel report I am said that the this project did not comply with certain policies and they are actually submitted this to the World Bank and the MUSEVENI and the president and AES turned against the NGO's actions to collect the information the thing that is very-very exhaust presentation which presents the events leading up to the case.



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Pros

- (1) Power Gen
- (2) Employment
- (3) Water Storage
- (4) GDP
- (5) Irrigation

Cons/Risks

- (1) Displacements (S)
- (2) Flooding
- (3) Disease ?? (S)
- (4) Bio diversity (E)
- (5) White Water Rafting (E)
- (6) Livelihoods (S)
- (7) Costly (8) Pol. Risk (S)



So let us take the project first of all so the project is about building a dam on the Nile close to the BUJALGALI falls essentially to generate hydroelectricity, why should you go ahead with the project so there is power generation, what else employment may be you have something to control the water in case there is a risk somewhere what does that mean you can but you know at the same time you know you have both problems you actually preventing water from flowing naturally so this might actually then calls a little bit of flooding as well so I am not quite sure that that could cut both ways any other reason for doing the project but let me put water storage is there anyway because you could store water.

Any other reason for building the project so economical is not straight so it will improve the GDP fine so this I think are the key arguments for the project you will generate power provide employment it improve the GDP may be water shortage might could be a dress because your actually timing part there why you are not letting it flow in a draught year you maybe you will have water etcetera, what risk is the project fail when you say why environmental risk what is the risk here ok one is displacing people ok that is a very displacement it is very tangible risk so you will have to set up at displace people and that leads to people hiring to possibly change their livelihood because there going from one kind of an ecology to another.


So that is the key risk so it could cause flooding fine so you know is there will there be an outbreak of disease because you are actually damming the flow of the river most stagnant water and those kinds of tropical climates maybe this it will affect bio-diversity ((11:38)) your point did you have point same thing so biodiversity one second Swapnika had a random so white water rafting will have to be stopped and that is tourism revenue loss also employment so there will be white water rafting somebody had their hands of the same thing I fix livelihood fine somebody had the hand up here Jaikishan very costly so it is very costly possibly so we have the series of so far thing so dams there is potentially irrigation but I do not know how much agricultural land is there but here for it to be director hydraulic dam also have the potential to support irrigation sure.

So they could also be political issues are there in the country there are reasons for doing the project the reasons against doing the project are primarily there are there is some political reasons but a lot of it is either social or environment so this is in environmental issues when these are sort of social issues livelihood probably a social issue as well so primarily or risk are environmental and social so now you put yourself in the shoes off so what is happened here as these guys are presented as Arvind was saying Uganda felt they need augmented power generation capacity for reasons best known to themselves they went ahead said we will do development of hydroelectric dams they then went and found this AES cooperation which is based in this based in the US those guys tie up with the MADHVANI group.

MADHVANI group is a local Ugandan group so you have that local knowledge International expertise and they come and float this project together they have a certain capital cost for that project certain amount of it will be equity that AES will put in certain amount it will be depth that will read to be rain and they had a schedule for essentially export credit agencies to come


and put in that depth but what happened was that looks like this export credit agencies in initially reached out to would not be able to put in the amount of depth that was required and therefore they went to the World Bank and essentially century the multilateral investment guarantee organization MIGA the sort of say that can you guys put in the depth into this project ok so if you are MIGA would you put money into this project all viewers the World bank and you had to fund it how many of you would fund the project so all of you raised your hand so essentially the way may be I just get back to my slide here.

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Key Players and Roles

Player	Role
Uganda Government	Set the legal rules (PPA), Improve quality of life of Ugandans
World Bank ✓	Financing, boosting investor confidence, promoting Uganda's growth
IRN and NGO's	Ensure that social and environmental concerns are taken care of
AES and Madhvani ✓	Project Sponsors/Developers with a profit motive



So we have these are the key players here there is of course Ugandan government try to just going to buy the power and they have entered into what seems to be a relatively sweet agreement as far as the private providers is concern because the private providers this is I am going to generate power you have got to take all of that power and you have got to pay me a fixed cost and variable cost so essentially the private provider almost as guaranteed it there returns because irrespective of power generation there is fixed payment that come that comes in whatever power is generated is being brought out so the private plane seems to be taking very little risk and the seems to be getting return I cannot remember something in the neighborhood at 20 percent which is a quite high.

So the Ugandan government is a key player that is I am going to takes is on and you have the private provider here AES and MADHVANI whose is I am going to sort to make a profit that is

way there and then you have the World bank which is doing couple of things one it is putting money into the project but as we talk about in the last class the fact that putting money into the project also increases the reputation of that project in some sets people look at in it and say the World bank is invested then they done sum due diligence they supposed some water responsible like and also put money in so it is they finance but they also boost investor confidence so these are the key players the Ugandan government then find the Power Private developer that develops the project and the World Bank and others were extreme landing to the project of course the consumer the Ugandan citizen the end consumer of the power as well but they do not have a direct alignment with this project and it look if this project was being shaped relatively well will get your point just a second till now before you know this guy's came in.


So when we look at how so how did these guys come into the project how does the why did the International reverse network are anything to do with a project in Uganda correct so essentially there are also you have a sort of an American activist who puts this on the radar of other activist I think this is very important to understand with regards to social and environmental risks is that just because it happens in a particular region of the world it is unnecessary a localized issue, so there are for instance NGOs that are global in nature that keep looking for projects where there intervention they feel might be beneficial to the project.

So international reverse network as the name suggests is not localized at some point this comes up on their radar is not easy there that the first ones to notice all the same BUJAGALI campaign etcetera and that NEP or whatever you know all of those guys are already protesting against the project but these are small voices whether they are heard or not is anything you do that there is be some objection so these are small objections that can possibly been which is pushed inside but when a large play like the International rivers networks steps in then they bring with them what we call a large voice, first of all they can mobilized a large amount of money which means they can actually conduct a proper campaign for or against this project.

So they can contact in these days it will be social media campaigns etcetera and those days is it was probably a little bit more load tack in terms of brochures newsletters and articles in newspapers and magazines so on but they have the money to be able to reach a large section of the population and also to make enough noise so that pretty influential people in other parts of the world start questioning is this a project that is really being done for the good of the country


are you doing more harm than good, so small NGO's might create a little bit of rustle but sometimes is a gender popcorn to the plate of larger organizations who just have more bandwidth more survey strategic ability more money etcetera is actually be able to make this intervene issue when everyone need to sort out sad thing about it because otherwise you might have a big smear on your reputation so imagine if everyone in the world believes that this is bad and the World bank puts in money right then that is terrible outcome is for the World Bank is concern you will be branded forever catering to these kinds of project so at least they make you stop and listen and that is the story with which they come in.

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How fair is the project?

Risk	Level	Borne by
Technological Risks	Low	AESNP
Economic/Demand Risks	High	Ugandan Govt ✓
Supply Risks ✓	Medium/Low	AESNP
Financial Risks	Medium	AESNP
Political Risks ✓	Medium	MIGA
Social/Environmental Risks	High	Ugandan Govt ✓



When they assess the project technical risk are probably pretty low because these guys seem to know what they doing is AS seems to O1 there is a large number of power plant there is something like in Bangladesh and Pakistan whatever so this guys know probably enough about power there some questions on the economics side of things thus Uganda need some power at this rates when the economy be able to observe it supply risk in term of can the power be supplied that is pretty low so I think the falls have this good amount of water the hydroelectric potential is high you know the political risk are did mention but that is again why you bring MIGA in it they do not seem to be any obvious political risk because it looks like you know the states downstream are not really stop the water they probably have water in the water sources.

So yes there is a medium risk of the big risk is also a social environment risk and interestingly both of this risk are born by the Ugandan government which is where it is looks like the private sector has got a little bit of a sweet deal here so IRN looks at this in dam across the world have this problems because they cause resettlement they cause changes to the ecology and ecosystems are difficult to replicate in a manmade manner and right you cannot really go ahead and say I will create a marsh land somewhere because the number of interconnected functions in the marsh land are so huge and evolved naturally over decades that it is just not possible for us to start recreating certain ecosystem there is always a loss of ecological value through this kind of development so dams often have this sort of concern are been these is very typical economically I will generate the power I will create gobs GDP etcetera environmentally and socially what is going to happen same thing with the Narmada dam.

So same sort of issues there is and economic sort of driver there are social and environmental issues against so IRN starts looking at it and IRN then says this does not seem to be really fare between is AESNP and Ugandan government, AESNP virtually taking very little risk Ugandan government is taking a lot of risk and when Ugandan government is taking risk what does that mean, means it is getting passed on to the people of Uganda and therefore is this project is even necessary is or the correct project for Uganda so the raise of the number in objection what are the objections with the raise of one objection which is what till one pointed out is where was the competitive bidding process fine you wanted a hydroelectric project is this the cheapest project that you have out there is this the most economically viable is this the best value for money that is out there.

So that is one question and I cannot really answer that question because only went an ask one person I did not go ahead ask a number of people and then decide how much this would cost there also have some other objections what are the other objections will they raise so while generate power when your transmission infrastructure is in tater's improve the transmission infrastructure is much cheaper I knew the existing power will go a long way and why you investing so much in this what about alternative power sources fine you have hydroelectric potential but what about geothermal power what about solar what about alternative power sources that might actually I have been more in a beneficial other points.

So because you have a relatively costly power plant the prices are going to be high i so does that mean you are only going to benefit the rich industries that produce a lot how does the power get translated into being used by the common persons and because Uganda has relatively low GDP it is too much to ask the state to subsidize the power so that might be difficult to do and therefore are you really again building a project for the rich by the rich to benefit the rich rather than a common man project so these are all the questions that there asking AESNP and Ugandan government how to respond to this how do they defend them self, what have they done have they done anything on this kinds of economic issues social environmental issues have they done anything at all.

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The slide features a blue gradient header bar on the left and the NPTEL logo on the right. The title 'Socio-Environmental Risks' is centered. Below the title is a bulleted list of risks. A small video inset in the bottom right corner shows a man in a red shirt speaking.

Socio-Environmental Risks

- Displacements of homes and livelihoods
 - 2,236 and 14,496 respectively
- Displacement of cultural heritage
- Environmental degradation, extinction of fish species
- Destruction of tourist environments

So they did environmental (())(22:37) and this is what Arvind pointed out so you said 2236 and you know you guys remember how many consultations they did so they said 1000 on consultation there is a large amount of work doing thousand consultation than and so the is a lot of effort so they have identified many things 2236 people and so many livelihoods will be disrupted cultural heritage will be displaced so it is not like them they have not done anything they have done an a assessment understood the environmental degradation destruction of tourist environment etcetera and they have proposed solution some of these they said.

This is what we will do you know we will sort of recreate some cultural heritage center here there some very amusing connect draught of what they did because there was also first of all they

say look we also thought a little bit about which waterfall to pick and Arvind had chart that where if you have pick one waterfall you would have got on lot of economic benefit but the environmental degradation would have been terrible and there is another waterfall where you would have minimize environment benefit but probably not worth building the whatever the dam there because these hardly any powers comes out tried to balance they have tried to sort of maximize economic output while simultaneously minimizing economic their environmental degradation except.

So they come back and say look it is not that we do not know about this but we thought all of this, we thought about this we picked a location we have done an analysis is not just you know some naam ke waaste whatever you know we were actually written 10000 consultation we have got this huge report that we prepared we have got precise numbers we have a plan so there is one story where call with the spirit in the wall story where there one indigenous group that sort of believed that there sort of you know the spirit that guided that tied they know that God that they tried followed resided in this waterfall and by damming the river the particular smaller waterfall would obviously stop flowing because you dam the river as a result which that God would die and if that God died then the fortunes of all those people in that community would essentially disappear and would essentially they would be a god bless communities that go to hell whatever acceptance.

So this was belief and the concern I am not going to pole you guys whether you believe god or not but nobody really knows the answer let us sort of the honest so there conceptualization God is probably as good or as bad as your mind but anyway it is a point of view it is the largest number of people and has been taken into consideration so there are couple of options one option is say because this is a ridiculous story Gods do not live in water falls and if god is so powerful than in find a way to live without the waterfall, so your argument is self is wrong and therefore we just want to develop right so that is the ride roughshod view the other view tis to say look we have the problem here that has solved so what this guys did is they said .

So how would you solve the problem so they call this I might not be coating this accurately but I think they called the which doctor from South Africa equivalent and this guy essentially say you know what I can transfer your God so I can take your spirit from this waterfall and transported to their other waterfall to which by ways very close to way of being resettled so where I would be

seen this thing in movies so they put on them costume and essentially he succeeding in moving the spirit from one waterfall to the other at least every one believe that he move the spirit from one waterfall to their life I said I am not passing any judgment on any of this it is probably as realistic as anyone else is conception but the point is this required some lateral thinking which these guys were up to doing right rather than just sort of trying to suppress concern it thought about it little bit of expense etcetera but let us keep the community happy.

So the point I am trying to make is they did not just disregard this risk they bent the head did something about it so great so they did all of these but is this enough is there essentially the questions correct so I think if goes back to the point they have done so IR and criticizes them and says look you have not done a bunch of thing this guy's come back and say no-no what do you mean I did thousand consultation I move spirits from one waterfalls to waterfalls so I did this all of this kind of things what do you mean and IRN said that fine you have done something but still I have address many of concern why this project why have this cost, why this people, what will happen to the I mean why AESNP and what will happen to the power of after you produced it where are the answer show me the power purchase agreement.



Let me see what deal you sign with this guy let me compared to the other project across the world and see if it is a fair deal or not and what is the Ugandan government say to that No power purchase agreement is confidential and I would not tell you why I selected this person I would not tell you what time what you I need to pay him I would not tell you what the terms are but you have to believe me when I say that this is beneficial this is where it starts getting stuck quite of it you know in terms of the you know the Ugandan government essentially there is code that MUSEVENI makes there essentially where you says I am sick and tired of people coming all over the world thinking with they know what is best for Ugandan some German girl says all of this I ask her where Ugandan is tell she's never visited us and she is never being.

So we are local people we understand our problem I have been elected or I am running this country for a long period of time please let me make my decisions it is one point of view the other point of view is this is all the bad practices that we have talked about rolled into one competitive bidding no transparency I do not know what agreement you are signing no real economic impacting assessment all of those kinds of this is a so this a little bit of the impart

those kinds there now because IRN is such a strong player in this field this issue comes up and is at a level of has been publicize this level than it actually cause the World bank to stop it in think.


So essentially the lesson here is transparency is importance we have been saw in the last class that this one on the big issues with double as well and android in the sense that nobody knew what agreement they had sign do you know why when there was no competitive tender for Maharashtra all of those who are some of the plan that the new government actually stud on to knock them off so very similar story you know what you do not see what you cannot see you often do not trust again so risk of is there favouritism it is why did we select this particular group of people, why did we sign up PPS if nobody is exposing that then in the hands of a player who actually has some resources becomes a little bit of it deadly weapon and they actually raise it so the point is that these issues of the transparency can be picked up a wide variety of player and they can be raised up even if it is the player who is not connected to that geographical area and graphical regions as a result of it the project very quickly be stop.

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What has AESNP done?

- EIA and EAP
 - 2,500 Page Report
 - More than 1000 consultations with local groups
- Promise to relocate people
 - Will 15,000 people be happy with this?
- Monetary compensation
 - How much? Will it be enough?
- Developing a cultural center
- Developing tourism downstream
- Planting trees
- Talking to Spiritual Leaders



Socio-Economic Issues

- Uganda needs to develop as a country
 - Is power the way to go?
 - Or if people are so poor that they cannot directly benefit from power, should other poverty alleviation options be explored?
- How much does this Dam cost?
 - Sri Maheshwar Hydroelectric project costs half as much per MW
 - Are tariffs too high? Should the sponsors settle for a lower ROI?
- Does this project benefit the people of Uganda?




So in this case what happens is AESNP did this promise to relocate monetary compensation they do it all of these etcetera, so IRN say look you have not meet the concerned this may not benefit the poor the process is not transparent alternative options are not considered project is too costly feasibility analysis is float so they do this all types of campaigning insides the NGO's around the world to mobilize repeated letters and when I say a letter they probably have some backing a pretty influence people's so the board of IRN, I have not gone and check probably have some influential people so that when a letters when goes to the World bank director it is not something you crumple and put in the dustbin you at least say I need a firm response to a letter like this.

So they are the ability to able to raise this issue in certain cases like this you might argue they doing the right thing but in certain case they may not NGO's may not necessary been doing the right thing, one of the dynamics we have to understand is that how do the NGO survive of this sort sometimes they survive on campaign like IRN does not explicit statement in the case they say look we have to choose our campaigns wisely very often I am looking for campaign because only if I campaign effectively will people fund me and order we to get funding I need to find campaign and therefore sometimes your ideology might move it from doing the thing to continuing to do what you have been doing which may not be the same thing at all.

So I mean that I am assuming and that detail is not provided in the case but that is why they working with local NGOs their presence on the ground they probably talking to people a lot of this will be done relatively regress they would not people sitting somewhere in California


commenting on this so they would have local partner etcetera goes to court obtain PPA release convinces the World bank at least to send an inspection panel to study the project so say's look you want to funded fine but the World bank so say ok let me at least think so we talked about all of this.

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How does the Scorecard read?

Issue	IRN's view	Govt and AES view
Environmental Concerns	Not been taken care of	Adequate work has been done
PPA and Economic Concerns	Raw deal for the people, WB submitted incorrect facts ✓	The Parliament approved it, and they know best ✓
The Role of NGO's	Critical in preserving social, environmental and cultural equity ✓	What do foreign NGO's know? They haven't been to Uganda and they argue with incorrect information



So and this all this data that is coming out so the MAHESHWAR hydroelectric project cause half his much because people say condition there are different you cannot compare this is being built in the Jungle the construction cause a very different all of that but this data is coming up, so anyway this is the score card IRN disagrees with everything environmental concerns the government says no we have done the adequate work for the power purchase agreement they say no this is raw deal for the people the government say's you know the of parliament look at the power purchase agreement and the parliament is elected by the people they know best that who are you and in in and run my country for me so on and so forth.

So IRN take it is role very seriously and MUSEVENI says what do you guys know why do you guy's coming from somewhere and stopping my development this could be a game changer for my country could provide jobs people are starving so this is the argument.

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What should the WB do?

1. Continue with the project because potential economic gains are very high
2. Scrap the project and investigate alternative energy sources, reduction of distribution losses, and other poverty reduction programs
3. Continue with the project but ask AES to take more environmental and social precautions AND renegotiate the PPA



So now the World Bank has choices should I continue with the projects should I scrap the project should I continue with the project but ask this guys to take more environmental precautions which parts should I take.

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What happened next?

- WB Inspection Panel found a number of non-compliance's regarding environmental and social issues
- Project contractor was investigated from Bribery and the project was halted
- Ugandan Court ordered release of PPA in November 2002



So this is where we are and this is the analysis now just in terms of what happened next World bank inspection final actually finds the number of non-compliances regarding how the world Work Bank view social environment so they sale look you guys are not complied with many of the safeguards that we have any place there also simultaneously was some bribery investigation

that was going on the contractor that was selected the Ugandan court then ordered to release of the PPA and made it public.

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What Happened Next

- Survey by NGO Prayas found project to be economically a bad deal for Ugandans compared to comparable projects
- August 8, 2003 AES announces withdrawal from the project
- Ugandan Energy Ministry puts project out for competitive bid and receives 5 proposals!!!


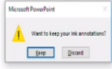



There is and NGO called PRAYAS comparison with what was there in the PPA and found out that compared to other hydroelectric dams in the world this seem to be a bad deal for Uganda in terms of the capital cost in terms of the price of power etcetera and in August 2003 AES announced that it would withdraw from the project and said loot at too many hustle there I am been this guy's say I have not done enough environmental safeguarding I am being investigated it for bribery here this somebody is telling me that I need to build a cheaper that the power purchase agreement is unfair just too many headaches for me to deal with (0)(33:29).

So deal follows the rule the Ugandan energy ministry self ok fine I still think it is a good project let us put it out and don't want they find that there are five people who submit comparative proposes each one pushing each other cause down to actually build a project at a much cheaper cost to supply power to Uganda some ways one could say that while IRN was not able to stop the project perhaps whatever they were able to do is to create enough of buzz to set this is dynamics in place that finally much more competitive procurement selection was award.

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What could have been done differently?



So well we will talk about what could be the differently but I want to show you this video just this look at that tone of the titles largest certified clean energy and development Africa reduces co2 emission by almost 1 million tons per year so this are this is the consortium that one that bit that fight people there on reduced the cost of power 70 percent is social and the Unique Precedent of PPP model for responsible investing and help drive growth in Africa.

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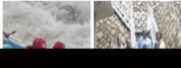

Bujagali Dam, Uganda

The government of Uganda, with help from the World Bank, the African Development Bank and private companies, completed the construction of the 250 MW Bujagali Dam near Bujagali Falls on the Nile, just downstream from the Nalubale Dam and Kira Dam, in 2012. The dam was developed through a Public Private Partnership (PPP) entered into by the government of Uganda, Uganda Electricity Transmission Company Limited (UETCL) and the privately-owned Bujagali Energy Limited (BEL), a special purpose company, owned by the Industrial Promotion Service (Kenya), the Aga Khan fund for Economic Development and Sithe Global Power LLC. The PPP contract will expire in 2042, after which full ownership of the dam will revert back to the Ugandan government. By the time the Bujagali Dam was completed, the total costs had skyrocketed from the initial US\$800 Million to \$1.3 billion, including the transmission line.

Unfortunately, the expected reduction in electricity costs has not been realized, and instead the average cost of electricity increased after the dam was commissioned. It's now the most expensive hydropower in Africa, making it unaffordable for many Ugandans. The dam drowned the treasured Bujagali Falls – a spectacular series of cascading rapids that Ugandans considered a national treasure. The dam submerged a place with great cultural and spiritual importance of the Basoga people, indigenous dwellers in the dam's project area. Issues of compensation and resettlement related both to the Bujagali Dam and its transmission lines have not been fully resolved. **As a result, the economic benefits of the Bujagali Dam have not yet been realized.**

Local environmentalists say the costly dam harmed Uganda's chances of pursuing more sustainable energy alternatives, pointing out that the Bujagali Dam failed to help the 86% of Uganda's population who are not connected to the national grid. NGOs are pressing for the development of alternative renewable energy sources, a sustainable fuel wood program, and improved efficiency to reduce the very high levels of waste in the existing system. Groups are also concerned about the dam's impact on the health of Lake Victoria, which supports millions of people and extensive biodiversity.

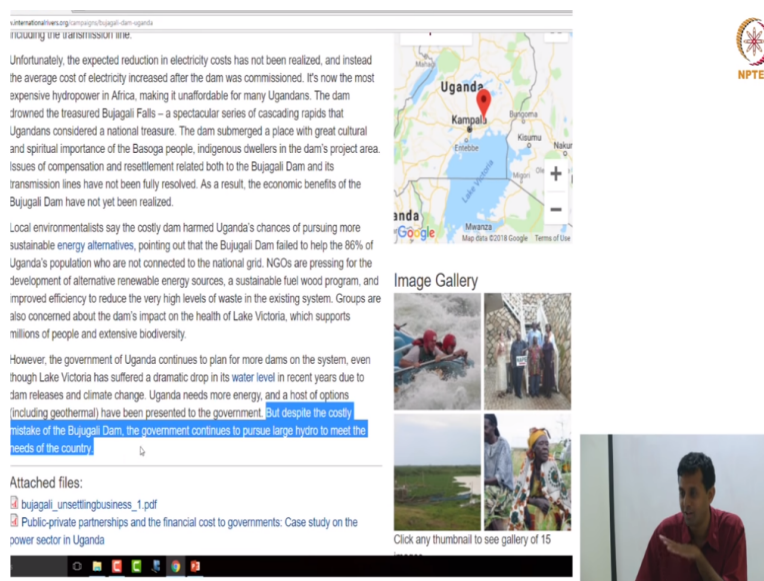
- Program or Campaign (1)
 - Nile Basin
- Blog posts (6)
- Fact sheet (1)
- Resources (79)



So that post the competitive bidding this is the what these guys have to say on the project but is also this is the IRN webpage let me see if I can highlight a few thing that are so if the

government to Uganda help from World Bank this is etcetera-etcetera, unfortunately the expected reduction in electricity cost is not been realized and instead the average cost of electricity increase after the dam was Commission it is now most expensive hydropower project in Africa I think it is a fare guest that the person who made that video is not the personal who is writing this making it unaffordable for many Uganda's the dam drowned the treasured BUJAGALI Falls a spectacular series of cascading rapids that Ugandan's considered national treasure, so we lost economic value not gain 2 percent the dam submerged a place with great culture and spiritual importance of the BASOGA people I think this were the one whose spirit has to be delegated as a result economic benefits have not been realized.

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However, the government of Uganda continues to plan for more dams on the system, even though Lake Victoria has suffered a dramatic drop in its water level in recent years due to dam releases and climate change. Uganda needs more energy, and a host of options (including geothermal) have been presented to the government. But despite the costly mistake of the Bujagali Dam, the government continues to pursue large hydro to meet the needs of the country.

Attached files:

- bujagali_unsettlingbusiness_1.pdf
- Public-private partnerships and the financial cost to governments: Case study on the power sector in Uganda

Click any thumbnail to see gallery of 15

Local environmentalist say the costly dam harmed Uganda's chances of pointing out pursuing more sustainable energy alternative pointing out that the BUJAGALI dam failed to help the 86 percent of Uganda's populations are connected to the grid and NGO's are doing this that whatever their concern however the government of Uganda continues to plan for more dams on the system.

Uganda needs more energy that is true and host of options have been presented to the government but despite the costly mistake that the BUJAGALI dam the Government continues to pursue large hydro to meet the needs of the country you can see how same time same day we actually have two different we have got one video that says one thing and another video that says

another so you have all the tension that you have to resolve correctly for our purpose the story is that the environment social and in some way is the process was not really transparent and what that did they allow NGO's to get in and really put a spoke in the wheel in this case probably for the better because they could kick out the AES and MADHVANI group do fare and comparatively bidding probably lower their prices and still build the dam generate some money but IRN continues to be unhappy and so the issue is you have got a when you do this project you have got to be ready for people to come out from wherever which ever direction and start questioning the project so that is why competitive bidding open examination in debate.

So more transparency is often better because people who question the project probably they have better chance at finding there answer problem is it is a lengthy answer if I enter into debates on everything with they will never get done so that is where it is important but stake holder are like to be satisfied but the process of development matter see objective depend on whose perspective we are looking at so in any Endeavour there are always winner and loser so you can take the winner perspective and you can take the loser perspective some people did not get power got power but some people have to move of no fault of there is so there is always winners and losers so there is no objective perspective in this but yes been people tend to cherry pick there and that why you need to get better in fall.

No I think he was a completely what I can say see it is sort of black stone capital so there a bunch of private place to brought their own funding with them World Bank might not have been involve it at all those it was interesting to see that one so well AES pulled out and then MADHVANI was a left without a partner or both of those World bank did not pulled out first so I think and this is where there a little bit of catch 22 and this is the problem when someone like World bank is you also feel that there this is a chance for development here.

So you do not want to pull out you want to see if you can explore all of this options and in this case I would like to think that over a period of time I want to explore and come to the same conclusion but possibly earlier other thing happening this bribery investigation this that and AES and essentially said look we cannot leave a money sitting here for this long because that is opportunity cause you can invest it elsewhere and so off them it that is exactly the chart issue you have a country that democratically stable it is a dictatorial country and therefore should you even go there but then the point is if developmental organization do not go there and develop

what chance is the country have so on both side to be able to say on political risk are potentially high but at the same time so and that was the big issue it chat camera because it was just a political risk so on.

How the project how the fund would be used in that project etcetera were really high, here those kind of risk seem relatively low in the sense power is been generated that mean no the energy is good we can find a way to make sure that it is distributed equally so from that perspective I think it is not concern as they would be in chat great.