not restored. And whereas the archaeological remains you know and whereas some of these properties which are restored back. Critical infrastructure includes hospitals, police stations, and ATMs, water supply and they are all subjected to the high risk.

And the roads which is asphalt roads which having the low risk and gravel roads and unpaved roads which are more into the high risk. That is how the categorization of the built environment into 3 vulnerable classes.

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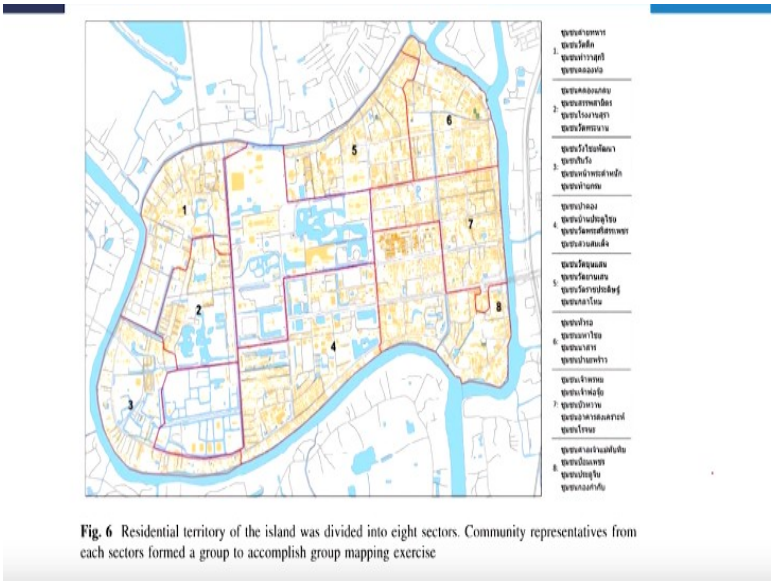

Fig. 6 Residential territory of the island was divided into eight sectors. Community representatives from each sectors formed a group to accomplish group mapping exercise

And then coming to the social approach, what they did was they divided into 8 sectors the whole region into the eight sectors like you can see the River Delta which is forming out and the whole heritage properties about here. And that what they did was they divided this whole territory residential territory into 8 sectors and the community representatives from each sector formed the group to accomplish the group mapping exercise. So there is a huge exercise what they did developed in each sector.

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A difficulty arises in comparing the two maps because of their spatial data format. The traditional flood risk map uses 1-m raster grid cells, while the risk perception map is based upon polygons of varying sizes.

And collected a lot of inventories and the data. So the biggest difficulty here is comparing the two maps because of the spatial data format one is the traditional flood risk map uses the one-meter raster grid cells, whereas the risk perception map is based on the polygons of varying sizes. So that is where a difficult to compare the same set of spatial data.

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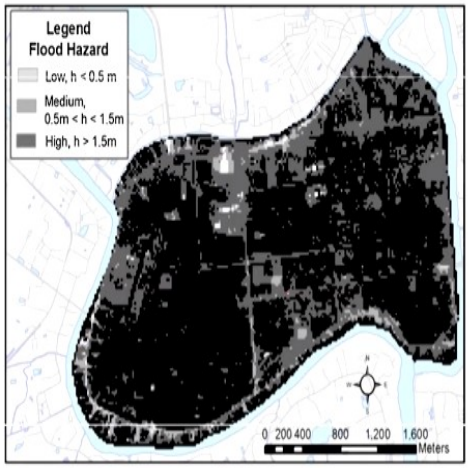

Fig. 7 Flood hazard map of the extreme flood event in 2011. The levels of hazard are identified based on threshold values of 0.5, and 1.5 m depth of inundation

When this is the flood hazard map of the extreme and there is given the threshold values of 0.5 to 1.5 meter depth of inundation there is inundation map and if you can see that this whole region is completely flooded right about 1.5 meter height of inundation. And on the banks at least you can see that the whole thing is in the inundation.

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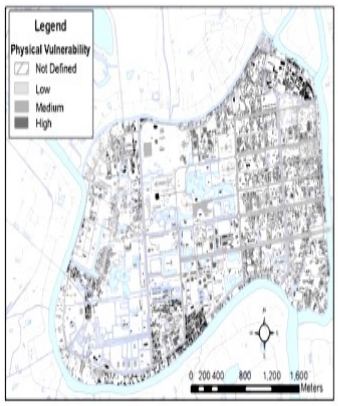

8 Physical vulnerability

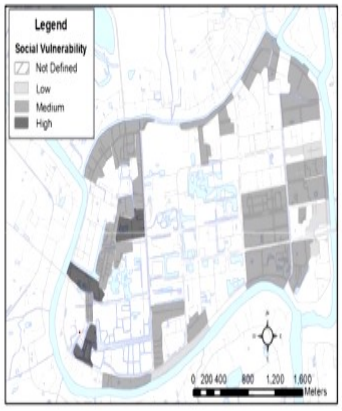

Fig. 9 Social vulnerability

So that is how what they did was they tried to classify different layers of it and like physical vulnerability now when you talk about the physical vulnerability what are the places which has been in highly damaged, medium damaged, and the low damaged and which has been not defined. Similarly, the social the target groups which are actually which are the most of these communities which are often affected and this is the social vulnerability map. **(Refer Slide Time: 19:56)**

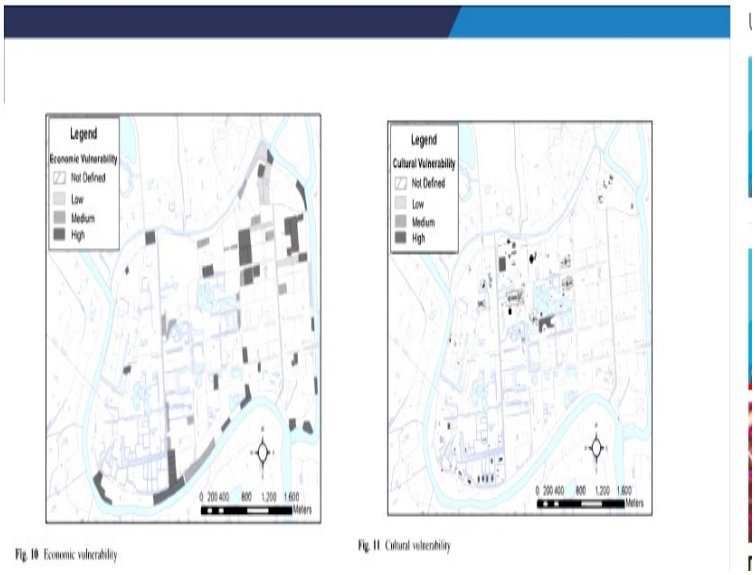

Fig. 10 Economic vulnerability

Fig. 11 Cultural vulnerability

And the economic vulnerability: When we say economic vulnerability, when the flood happens obviously what kind of business sector often closes down, shuts down for a period of some time and or how their livestock gets damaged so this is all about the economical. Mostly you can see that on the edges you can see that most of the commercial aspect has been damaged.

The cultural vulnerability: and you can see that you know much of the cultural properties are under the high risk.

And this is where one has to understand that the heritage which is UNESCO world heritage it is subject to the high risk and tomorrow if these things get collapsed and they get damaged then we are actually closing the history we are actually bringing an intense damage to the history the where the next generations has to learn about their own country their own ancestors.

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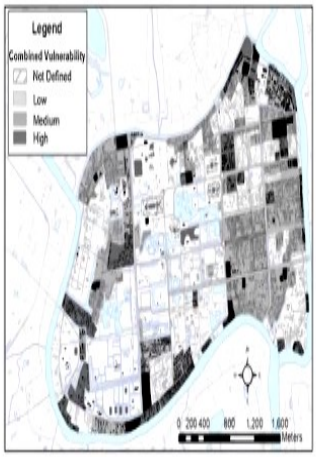

Fig. 12 Combined vulnerability

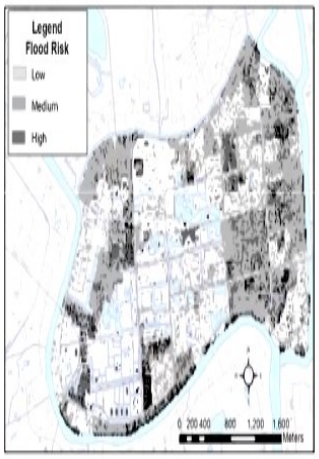

Fig. 13 Combined flood risk map by traditional approach

Now what they did was they tried to combine this map and one is using all the digital tools how they combined and this is again a combined flood risk map by a traditional approach. So by both by the social approaches and as perception approach and by their scientific approaches how they have able to get a similar set of data but of course they could able to identify. There are some possibilities which were more possible in the scientific approach.

But in certain perception approach they have lacking some kind of data. So that is then authors they have articulated very well in that report that what aspects they could able to get from these and what aspects they could not able to get in these. I think one can go through that report but here what we have to see is what we have to learn from is that how even the satellite imagery and the social understanding, how they are able to correlate with each other, and also they in parts they also contrast with each other.

I mean till now I talked about the flood analysis part of it and how different techniques have been used by various authors. But then from the conservation point of it how the ICOMOS.

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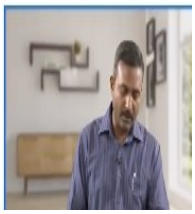
ICOMOS

Report on the ICOMOS Advisory Mission to Historic City of Ayutthaya (C 576)

28th April to 2nd May 2014



Or what kind of report they have produced on the historic city of Ayutthaya.

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1. Direct Impact of the Major Flooding in 2011 and Emergency Measures for Conservation

2. Mid- and Long-term Impact of the Flood Water

So one is there is a direct impact of the major flooding in 2011which, and there has been lack of some emergency measures for conservation as well because there is a also some rush process indicated. And this flood water will have both the mid-term and the long-term impacts. You know on the heritage sites. So what kind of conclusions they have come up with now when we say about the conclusions.