The need to undertake social and political changes was highlighted as the means of creating public high quality services, including education reform. The benefits of tourism should stay in Quintana Roo and have a better local distribution. Corruption, greediness, and the alliances between politicians and entrepreneurs were perceived as hindering the provision of high quality public services and creating lack of trust between people and public institutions.

This report presents the outcome of a process of reflection involving 60 citizens from Cancun, Mahahual, Playa del Carmen and Tulum about climate change held between November 2008 and February 2009. Discussions did not only revolve around hurricanes. On the contrary, most citizens perceived that climate change is much associated with socio-environmental opportunities and challenges, as it is with climatic hazards.

The process

The need to undertake social and political changes was highlighted as the means of creating public high quality services, including education reform.

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Citizens’ viewpoints

Despite this process is not representative of general public opinion, this group of citizens expressed a viewpoint shared by many local inhabitants.

To the hurricane threat we need to add drug dealing related problems and social violence, whose solution will require similar social, institutional and cultural changes to the ones needed for climate change.
When the hurricane comes!

Positive or neutral assessments

- The government does a good job
- Hurricanes bring about economic hardship but not bankruptcy
- In the Mayan Riviera is unlikely that, if current trends continue, hurricanes significantly affect tourism fluxes
- They may bring benefits for some economic sectors, such as construction and recycling
- Media tend to exaggerate (also civil protection officials). This may unnecessarily frighten tourists, but now tourists can contrast information thanks to the internet
- In Mahahual, Dean left more unity and order, but also a lot of frustration due to the slow recovery
- Hurricanes may be useful to stop development project that do not take into account coastal dynamics
- We cannot be sure that the increase in number or intensity of hurricanes is due to climate change
- Hurricanes are the risk that we have to face for living in this paradise
- We are affected by hurricanes (for instance, the low tourism season is now longer), but we have shown to the World that we can cope and recover very fast
- Insurance prices tripled after Wilma, but insurance companies are now reviewing their fares. It is always better to keep some savings

Negative assessments

- Mahahual and Cancun have been much more affected than Playa Del Carmen and Tulum
- It has been really difficult to rebuild Mahahual after Dean due to the lack of income and the fact that the village was in ruins and without vegetation
- One of the main problems of hurricanes is beach erosion, but this is also due to poor development planning
- The whole climate is altered, there is no rain season anymore, we only have storms
- Dean left Tulum empty of tourism and they will not come back until December
- Hotels pull down the mangrove and build on the dunes, coral reefs get sick and all this opens the doors to hurricanes
- It might get worse as more people keeps arriving

Wilma in Cancun as it was lived by Cancunenses

- Wilma was disheartening for the whole city, and we have not yet recovered. Many people do not believe any more in their own city
- There was a huge contrast between the rapid recovery of the hotel zone and the slow one in the regions and popular settlements
- We were left alone, the only help came from the army and the electricity commission
- The hurricanes was an “eye-opener”, the looting made us realize what Cancun has really become
- 2005 and 2007 were critical due to the massive arrival of environmental refugees from Chiapas and Tabasco
- Wilma increased insurance prices and limited the range of coverage
- We were seriously affected, but we managed to get up upon our feet again
HURRICANE WILMA: A TURNING POINT

The beaches of Punta Cancun, Punta Nizuc and Playacar were lost. In Cancun, we required 6 million cubic metres of sand for reconstruction, but the “new” beach had been washed out again before de 6 months.

Wilma unveiled the urban deficits and lack of public services suffered by the local population. There are two co-existing cities: the touristic one and the one where tourism workers reside. This is an expression of the strong social inequity exacerbated by demographic growth, and disordered urbanization. Poor people live in the most risky areas and furthermore they count with less capacities to anticipate. As a corollary, this pattern of development worsens the adverse effects of natural phenomena turning them into disasters

(Source: Study prepared by “Jóvenes por México”)

Wilma caused losses for 1,500 million US dollars only in insured assets, but there were many other losses that have not been quantified.

The beaches of Punta Cancun, Punta Nizuc and Playacar were lost. In Cancun, we required 6 million cubic metres of sand for reconstruction, but the “new” beach had been washed out again before de 6 months.

CITIZENS’ VISION OF THE OBSTACLES AND OPPORTUNITIES FOR ADAPTATION

Lack of interest
Short-term agendas
Corruption
Institutional inertias

Current paradigms
New paradigms

Climate Change Adaptation

Changes of discourse
Conforming new agendas
Manifestation in terms of laws and budgets

CIVIL PROTECTION: QUINTANA ROO’S PRIDE

Participants acknowledged the effective job of the government in the implementation of the early warning and civil protection systems, and the reconstruction of urban infrastructure in the touristic areas.

However, it was not clear whether these mechanisms, which depend on Federal Disaster Funds, would be sustainable in an scenario of generalized increase of climatic disasters in different areas of Mexico.

In addition, immigration from neighbouring States, such as Chiapas and Tabasco, which have been dramatically affected by disasters or economic crises is already posing serious challenges to Quintana Roo.

Citizens acknowledge and are grateful for the excellent job of the Federal Electricity Commission
- We have more days of "bad weather"
- The climate is more arbitrary and forecasts are not useful yet
- Our climate change is that people start to steal instead of being solidary. It already happened in Cancun and could get even worse
- The worst risk of climate change is related with food security. Quintana Roo is highly dependent from delivery networks. Everything depends on tourism, which is a rather vulnerable activity
- It may affect global tourism fluxes. For instance by rising the price of fuel or by provoking the cancellation of flights
- It may foster global economic crises and resource scarcity
- Up to now, the tourism sector has shown high capacity to respond to global distress, but this might change
- The image of the destination can be ruined. The beach may lose its appeal... or even its sand
- The heat within the city is more intense. Specially within the popular colonies sponsored by the government. This affects people’s wellbeing and mood. It could even increase the levels of violence
- We could lose one of our main touristic resources, the coral reef, due to the acceleration of the whitening disease

OTHER RISKS ASSOCIATED TO CLIMATE CHANGE

- Magroves are deforested
- Hotels are built on dunes
- Coral reefs get sick

THE EFFECTS FROM HURRICANES GET WORSE

CLIMATE CHANGE IS NEITHER PART OF POLITICAL AGENDAS...
- It goes unnoticed by government bodies (they are not even trying to solve the problem of waste)
- There is too much personal ambition, corruption, and lack of political will
- Governments do not even understand that mangroves are connected to beach erosion

... NOR A PRIORITY FOR LOCAL PEOPLE
- General apathy and the urgency of fulfilling basic needs
- Lack of interest amongst developers
- Fatalism and conformism
- Many people are immersed into consumerism and the paraphernalia of luxury

RISKS AND OBSTACLES THAT ADD TO CLIMATE CHANGE
- Climate change is taking place in a context of general insecurity due to increasing crime, corruption and impunity
- The poor management of waste is creating health risks, besides degrading coral reefs
- There is a lot of fear of “not having enough” and a lot of uncertainty of “never be able to have”
- It adds up to the problem of drug abuse, which is in turn fostered by uncertainty, emptiness and frustrations
- The deficits in infrastructures and urban services, corruption and bureaucratic obstacles increase our vulnerability to any change
- Mass media create urgency and fear. This can either make people more responsible, or paralyze them even further
- Growth without development raises our vulnerability to climate change
- We are too focused on our personal goals and pay little attention to whatever is happening around us
CITIZENS’ INSIGHTS ON OPPORTUNITIES ASSOCIATED WITH CLIMATE CHANGE

CLIMATE CHANGE MIGHT:

- Raise environmental awareness and provide further authority to environmental groups
- Become an element of cohesion to create alliances and raise our sense of belonging to a global community
- “Open our eyes” to new life styles
- Promote reforestation, “green” architecture, and restoration of environmental services, such as the Nichupté Lagoon in Cancun
- Provide a new model of touristic development for the State that creates employment and attracts foreign currency, but at the same time provides wealth for local communities and pro-
tects the environment
- Implement sustainable agriculture through permaculture and urban orchards
- Promote the rescue of Mayan wisdom

A MISSED OPPORTUNITY

Participants mentioned a the missed opportunity of developing eco–technologies, which might be easily applied in this area ever-bathed by sun.

There is great potential for developing photo-voltaic, thermo-solar, solar thermo-electric, or wind, besides technologies to treat urban waste, new designs for “eco-housing”, and schemes for organic agriculture.

Unfortunately, “easy money” and the lack of planning and political vision are hindering the opportunity of creating thousands of qualified jobs that in turn would help to improve the state of the environment.

Acknowledging the irreversible consequences forces us to rethink our relationship with the planet.

Many of our current problems are originated from paradigms that used to be widely accepted a few years ago.

OPPORTUNITIES

Quintana Roo’s electrical grid is mainly nourished from the thermal stations of Valladolid and Merida.

These stations burn fossil fuels, such as natural gas or diesel in order to generate the electric power consumed in Quintana Roo.

BARBADOS, GUADALUPE AND JAMAICA ALREADY HAVE WIND POWER. BARBADOS IS THE MOST ADVANCED CARIBBEAN COUNTRY IN THE USE OF SOLAR HEATERS

(Source: Mona Whyte, Caribbean Energy Information System)
1. Overcome infrastructure deficits
- Create a modern Cancun with adequate streets
- Cancun produces plenty of revenues for the Federal government but in exchange it only receives scraps
- Create green spaces and places for social and cultural gatherings
- Implement the plan Cancun 2030 and create incentives to respect the laws

2. Urban integrated development including human and spiritual aspects
- Review our believes and update them towards unity and fraternity
- Introduce architectonic criteria that promote harmony with the environment and with our interior
- Wellbeing does not only depend on having a job, but also on living in a healthy environment
- Stop tolerating the voracity of developers (there is not enough room to even hung the hammock)
- Regulate the “pirate” condos and restrict timeshare all-inclusive schemes

3. Pilot projects showcasing resilient touristic communities
- Look for a specific region to implement a model of sustainable community
- Implement demonstrative projects for food production
- Attract high income tourism by showcasing green technologies in touristic facilities

4. Create carbon neutral destination
- Recover methane from waste in landfills and recycle solid waste
- Incentive photovoltaic and thermo-solar energy in hotels and windmills in the north of the State
- Avoid deforestation and build following energy saving standards

5. Promote ethical conducts amongst government officials and society
- Personal interests tend to prevail over the common good
- There are many people willing to accept even just a few pesos in exchange of acting unlawfully
- We lack the basic solidarity needed for survival
- To highlight the responsibility of the powerful in the generation of violence
- When corruption became gruesome, the private sector stopped its donations for social causes

6. Combat short-term perspectives (which provoke environmental and educative tragedies)
- Electoralist vision: during the campaign there are many promises followed by a complete disconnection
- Create accountability mechanisms that work during and after each mandate
- Politicians need to think in terms of interactions (e.g., mangroves-hurricanes-beach erosion)
- Reform the current rule of three-years mandates without possibility of re-election
- Limit that every new government is able to change all the rules once elected
- Regulate the construction of condos in the beach front. This is done to transfer the problem of beach erosion to the new buyers
7. Improve and enforce the legal framework
- Identify and solve the contradictions between different norms and enforce their application
- Train honest leaders to with a public service perspective
- Force the powerful to fulfil their tax duties and improve their perception about the government's honesty
- We have a cultural problem because we as a people are not used to demand from the authorities the performance of their responsibilities, we are the first to prefer the payment of "mordidas"

8. Strict respect of human and civil rights
- The lack of civil and legal guarantees provokes that people prioritize the security of their own family
- Disincentive the participation of police and politicians in drug trafficking
- Mass media emphasize the political gossip and crime and say very little about the social sphere

9. Mechanisms for controlling the government
- Politicians are increasingly becoming entrepreneurs and vice-versa, and seek how to favour each other
- People does not report because they are fearful of revenge; it is crucial to combat impunity in order to re-establish institutional credibility
- "The people" should lobby through tax resistance
- The political class is still based on clans y el caciquismo

10. Promote civic reflection
- The police and legal system are a simulation: I listen to you but do nothing
- Promote initiatives that are not started by the government
- Promote the knowledge of the law so that people can defend their rights
- Open the municipal decision processes to public scrutiny
- Citizens' opinion is not a source of information for Media except to report crime
- Lack of reflection about the dehumanization of the economic and political systems

11. Reform the State
- Deepen decentralization (we have to fly to México City for any administrative procedure)
- Laws have been reformed many times, but there is a lack of coherence
- Institute an environmental court with power over the general attorney
- Create an urban justice of the peace to sanction those in power who do not go by the rules
- All the power is monopolized by three families. We need a great national agreement, but for that we need to break through the current structures
- Implement an open list system of election

12. Cultivate the culture of working for the good of society
- Create a culture of public service and promote the idea that the government belongs to citizens
- Condemn "partidocracy" and the use public positions as political diving boards
- Government and entrepreneurs see people as workers, instead of citizens
- People do not trust the powerful because they have been systematically deceiving for too long
13. Improve the effectiveness of the administration

- Eliminate unnecessary bureaucratic obstacles in order to speed up the procedures that are truly necessary
- Institute a civil servants career and modernize public services without sub-contracting private companies
- Create mechanisms to force the government to consider scientific and expert advice for designing its development plans
- We have to start to trust that when something is agreed upon it will be respected

14. Public policies that change the development model

- The main problem with the current model is the few available options to live with dignity
- Establish alternative basis for living together around trust and credibility
- This model rises people’s uncertainty due to the low salaries and poor benefits

15. Combat the culture of exclusion

- Raise the expectations of the youth, middle class, and popular classes in terms of the available resources for their personal development
- Denounce the strategies of the elite to keep people ignorant, as well as the paternalistic attitudes
- Transform the type of relationship between tourists and employees in order to reduce contrasts and frustrations
- Stop discriminating those who own almost nothing. We have been trying to hide poverty but they are now crossing the fence, so to speak
- Limit the model of “all [locals] excluded”, and restore the public access to beaches

17. Combat the culture of shortage

- This culture is a conditioning that Mexicans receive from the cradle, it is promoted by families and schools and is rooted in the Spanish Conquest
- In synthesis it goes by “how can you aspire to become better than your father or teacher”
- Promote an emancipating education complemented with

18. Create a sense of identity and belonging

- There is a general feeling that if things go bad, one can always return to his/her State of origin
- We need a radical change that instils back in people the pride for their country
- Recover the Cancunense spirit of “living together in paradise” and promote integration policies
- We are losing our Mexican values to American ones, but without acquiring their purchasing power

19. Citizenship building program

- Create a vision of community beyond economic indicators that emphasizes human development
- Create committees of neighbours to participate in planning
- The entrepreneurial class is very much separate from the destination and are mostly concerned with maximizing utilities
- People dedicate most of their time to work ad get transported
MAHAHUAL: CIVIC STRATEGY FOR CLIMATE CHANGE (I)

1. Improve the organization and sense of the community
- There are many immigrants from diverse countries and transient population who are little concerned about this place.
- People do not see piling up their trash by the door of their homes as a problem.
- Only if we realize the strength coming from being united we will be able to influence the government.
- When income starts to flow into the town, everybody looks after oneself.
- Elections create and deepen further the existing divisions.
- We need strong bottom-up association such as the Costa Maya Association of Tourism Entrepreneurs or Mahahualeñas Women Group.
- We need leaders that unite us all and the support from external agents with no agenda.
- Implement participatory meetings involving authorities (like the one we had about waste collection).
- Attain visible achievements (such as the Jats’a-Já Festival) to combat apathy and foster organization.

2. Provide the area with adequate public services and infrastructures
- We have plans and projects already approved but the government postpone investments.
- The alcaldía (local authority) and the Association of Entrepreneurs need to lobby the government to force it to carry out its commitments.
- There should be a regular budget for construction and infrastructure maintenance.
- Cruise ship should contribute to the provision of social services for the local population.

3. Promote Mahahual and improve its image as a touristic destination
- Campaigns designed in Mahahual or in consultation with Mahahualeños/as.
- More campaigns focused on national tourism, but the one that comes to stay in hotels.
- Caribbean festivals and events. Organize tours in the forest, sunsets in the boat and other original products managed by local people.
- Improve the quality of the touristic services and the town’s aesthetics.
- Everything is ready, but tourists are not coming...

4. Attract investments
- We need to organize first as a community in order to attract investments.
- Diversify investments. Residential projects might attract larger investments than the cruise.
- This area has a massive potential for tourism, but there is too much corruption.

5. Simplify the procedures to obtain permits for development
- Reduce the costs for small businesses to obtain their permits, and establish a Ventanilla única (one-stop window) for investors; including legal professionals to provide orientation.
- Resolve the land conflicts between government and developers through open negotiations.
- Paying the fine should not be easier than respecting the law.
- Relax the environmental laws that are too restrictive and explain them better. Right now it is very difficult to know whether one is obeying the law or not.
- Increase the accessibility and organization of the administration. We waste too much time chasing government officials and policy makers.
6. Solve land-tenure problems
   - Create a clear vision of the future which is agreed by both the community and the politicians.
   - There are many projects but most of them either never take off, or are never finished.
   - Contingency plan to help the vegetation to recover after the hurricane and protect it against the subsequent fires.

7. Solve the housing deficit
   - Create an administrative mechanism to legalize, without further delays or costs, the properties of the people who have been living for many years (some more than 20) in Kilómetro 55.
   - Construct decent housing for workers at affordable prices.
   - Increase taxes in the urban properties that are not being developed.

8. Improve education and training
   - The government should invest much more in education. We need a language school.
   - We need to train people if we want to offer a good quality service.
   - It is difficult to find honest workers because we get here that one that nobody wanted in Cancun.
   - There is little conscience about our natural surroundings and the consequences of our actions amongst immigrant workers.
   - We need to be more responsible for our children’s education.

9. Create a functional urban centre
   - We need a central square with a shaded area where people can sit down and chat with each other.
   - Cultural centres, and a women’s house for training in productive activities.
   - Embellish our streets and control the problem of trash.
   - An permanent office to attend any kind of inquiry and any information request.

10. Improve civil protection services
    - Improve the organization, information and attention during the two or three weeks after the hurricane.
    - Be prepared for unusual contingencies such as for instance the storm of 1999 during which the road was cut for several days.
    - Create a local committee of civil protection in Mahahual.

11. Change some cultural paradigms
    - Stop believing that we are in possession of the truth, and support excellence instead of attacking those who stand out.
    - When someone is trying to organize anything, everyone else believes that he or she is trying to benefit personally.
    - Promote long-term views and punish opportunists.
    - Promote love and caring towards this place.
    - Increase our confidence about our capacity to attract development and enhance our discipline to honour our commitments.
1. Change cultural paradigms

- Individualism, greediness, “American Dream”: We attribute too much power to money
- If one grows up surrounded by violence and trash, one would not perceive them as something negative
- There is much apathy and cynicism amongst the population at large
- Many people perceive that the government and/or NGOs are responsible for solving all the problems, and therefore fail to acknowledge their own responsibility

2. Create identity and sense of community

- There are many immigrants who do not feel any kind of place attachment whatsoever
- Many developers are only concerned about making money as fast as possible. In general, many people hold a “miner mentality”: take as much as possible without leaving anything in exchange
- People have no problem throwing their trash in front of their doors

3. Enhance communication and coordination between civil society groups

- This would include the organizations providing emergency services. For instance, hospitals ignore the facilities and medicines that the other hospitals have
- There is a very competitive culture and every organization is always trying to stand out above the rest
- Most civil organizations are not independent from the government
- There is general mistrust

4. Promote strategic planning long-term views

- Reform the current rule of three-years mandates without possibility of re-election, and create mechanisms to share information between exiting and incoming administrations
- Both politicians and the community lack a clear vision about what future is desired

5. Create a new political culture and improve the system of justice

- Legal contradictions enable corruption
- The political career is generally understood as a means to become rich
- Rulers give positions to those who help them to get into power, instead of considering who is better prepared for the position
- The organized crime is becoming a major actor with great capacity to influence and control the government structures
- Lack of controls and incentives to make obey the law
- Policies are not oriented towards people’s needs but towards winning elections and getting rich

6. Make civil society independent from government and private actors

- We are trapped in a problem of political manipulation
- The government does not allow independent organizations to work freely
- Civil society accepts paternalistic schemes in order to achieve privileges and security
- There is impunity for the use of repressive methods and threats to appease protest
7. Decrease the pressure over popular classes and local entrepreneurs
- Every time it is necessary to work harder to make the same money while the price of housing is too high
- There is a disloyal competence from corporations and “pirate” companies
- Many of the resources that might help popular and middle classes disappear due to corruption

8. Improve education and training
- Training is a privilege instead of being a right. Education should not be a business
- There is little awareness about the environment
- Sometimes one is under the impression that the government is interested in keeping people ignorant
- Many people lack personal objectives for personal or professional
- Teaching professions are neither valued nor acknowledged
- There are some improvements in terms of training, but step backwards in education. However, even the improvements in training are not enough given that hotels usually have problems to find trained workers. We need more resources for scholarships

9. Create a culture of volunteering
- Everybody is too busy and worried about their own problems
- Many people spend all their time working and still get low salaries
- The recurrence of catastrophes makes people increasingly insensitive and reluctant to help
- Private companies do not make donations despite the huge quantity of money they manage

10. Combat all forms of violence and family disintegration
- The high levels of alcoholism and violence hinder the capacity of response of society
- Low salaries force all members to work, while the lack of extended family networks aggravates the problems of education
- There is some government help, but many children are still locked up and are not properly attended
- We have to learn from Mayan communities. They have community rules to support families whenever a member passes away

11. Adopt measure to retain the income from tourism
- The tourism bureau should stop privileging the “all-inclusive”
- The tax redistribution made by the Federal government does not respond to the needs of the region
- Foreign companies monopolize the hotel market and import everything from abroad. These companies find ways to dodge the observance of labour and environmental laws
- The best paid position are offered to foreigners, while the unions do not do their job

12. Create a healthy urban environment
- Ensure that hotels do not alter ecological cycles or the access of local people to the beach
- Increase green areas, trees, public space and the size of the lots for housing
- If the high prices of the land do not allow another option, permit more than three stories in some areas
- Change our relationship with trash
- Create spaces for social encounter, instead of just parties and spaces for consumption
1. Establish as a priority the protection of the aquifer
- The cenotes (sinkholes containing groundwater) are the basic touristic product of Tulum
- It is fundamental for the survival of the coral reef
- No development should be allowed before the sewage system has been built (using taxes from tourism activities and developments)
- Enforce the existing planning instruments that protect underground watersheds
- Develop infrastructures to use rain water
  - Improve or eliminate septic wells
- Avoid developments without green areas

2. Moratorium on the construction of golf courses and all-inclusive
- This is not the kind of facilities that the tourism who comes to Tulum is looking for
- We want development, but one that is sustainable and benefits local people
- Golf courses require lots of water and would pollute the aquifers
- These developments eliminate the mangrove with the subsequent biodiversity loss and the elimination of the natural protection against hurricanes
- The problem is that some entrepreneurs come with huge amounts of money with which they are capable of corrupting anyone

3. Impose social justice and ecological criteria for land transactions
- Land from ejidos is often sold without having into account the consequences for the community
- Regulations to limit the greediness and corruption of real state trafficking
- Reflection circles to raise awareness in Mayan communities about the real value of land
- Solve the conflict with Pino Suárez and ensure land ownership for the cabanas on the coast

4. Improve the education system
- Stop diverting resources from education to other purposes
- Improve the quality and vocation of teachers
- Create opportunities so that everyone have the chance to attend university
- Educate young people to participate in order to combat people’s apathy and “shyness”
- Teach Maya in the schools

5. Educate and raise awareness about our connection with the environment
- We have to understand our symbiotic relations with our surroundings. For instance, the reef with the woman who works as a janitor in a hotel
- Many people do not participate even, if they are aware, due to the lack of time. Survival comes first
- We live in a constant state of confusion. It is not only a matter of education, but also wisdom
- We have to do an “ecological evangelization”, house by house, projecting films, organizing workshops
- Meet with researchers to disseminate knowledge about our inteconections
- Take the issue to schools and Channel 30. Culture and environment should go hand in hand
6. Create new consumption patterns
- Hotels should use biodegradable cleaning products, organic food, and so on
- We need incentives to lower the prices of eco-friendly products and increase the hotels’ demand
- Organize workshops and campaigns about ecological lifestyles. For instance, how to make compost at home
- Institutionalize events such as “Tulum Green Expo” and incentivize renewable energies
- Young people only work to pay their beer: This is a really bad situation!

7. Protect the true Mayan culture
- Maya are still the owners of this land even though they are being displaced
- We need to shift our mentality to stop looking down on Mayas and start valuing them
- Mayan culture offers us an outside look to capitalism
- Maya culture is a basic touristic product in Tulum
- Find ways of connecting with Maya communities (using Mayan translators)

8. Cultivate in the government a culture of working for the common good
- Combat the idea that government positions are for getting rich
- Get the government genuinely interested by the environment in order to change their economic policies
- The government’s plan is to make as much money as they can in the least time possible
- The anxiety to gain purchasing power is like a “cancer” in our society
- Local people are becoming tourism servants

9. Effective participatory mechanisms
- Create a civil council of environmental protection independent from the government
- People should help the government’s integrity by protesting, demanding and staying united
- Development should not be decided by the government but by the people
- The NGOs should not depend on government money

10. Combat corruption
- It is motivated by the interests of politicians, developers and public officials. They create chains of corruption and favouritism
- Receive money or offering jobs to people without an adequate preparation are not even perceived as act of corruption
- It is a common practice to keep working in construction sites that have been closed down and give permits to build on mangroves
- Create mechanisms of control and training spaces to cultivate humanistic values

11. Show the reality of mega-developments
- Demonstrate internationally the popular opposition that exist against this model
- Mega-developments exclude local people and leave few benefits
- Showcase “micro-scale” business alternatives like family-managed hotels or dry toilets, to mention a few
12. Create team-work culture
- Many NGOs are solely focused on looking for culprits and highlight what it is not working
- NGOs have to work with the private sector and the government in order to offer solutions and an alternative development model
- We should take advantage of the deep-rooted traditions that exist in Tulum in order to promote a more proactive approach for civil society in the sense of providing specific proposals
- We need policies to integrate immigrants, locals and Maya

13. Create an ordered Tulum that prioritizes wellbeing
- Link touristic development to urban services development considering that each hotel room attracts 12-20 personas
- Reduce the minimum standards of quality for housing
- Participatory planning even if this increase investments costs

14. Promote Tulum as the “Green Spot” of the Mayan Riviera
- Campaign in which NGOs, government and private companies join efforts to create a promotional brand and promote it internationally
- Easy the procedures for obtaining certifications and show that ecology can also be a business
- Promote alternatives such as the “Bioregió” (managed by Mayan people)
- Decouple Tulum from Cancun as a destination
- Force franchises to aesthetically adapt given that Tulum hold its own singular identity

15. Promote an urban design based on permaculture
- Train government officials in permaculture, ecotourism and Mayan culture
- Advise Mayan farmers in the use of more productive, but green, technologies
- Promote housing schemes that account the management of biological cycles. For instance, incorporating dry toilets or family orchards
- Promote self-sufficiency, caring for the land, and fair distribution of costs and benefits

16. Establish “Caribbean architecture” standards and promote renewable energies
- Change developers’ preconceived ideas about aesthetics and build integrating native vegetation
- Institutionalize and expand the “Tulum’s Demonstrative Tour of Ecological Houses” (an initiative that emerged from civil society)
- Create ecological architecture schools using the eco-developments emerging along the Cobá road as practical grounds
- Incentivise the models of eco-villages that are emerging in the region from the bottom-up
- Establish ecological criteria for investment projects
This table was prepared by the team of geographers of King’s College London. It is based on eighty interviews with citizens and social agents (Suggested citation: Pelling, M., D. Manuel Navarrete and M. Redclift. 2009. Urban transformation and social learning for climate proofing on Mexico’s, Presented at Universitat Hamburg, Institut fur Geographie, 12 January 2009)

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<th>Mahahual</th>
<th>Playa del Carmen</th>
<th>Cancun</th>
<th>Tulum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate-development discourse</td>
<td>Individualised adaptation in hurricane recovery. People thirsty for development</td>
<td>Limited climate consciousness, but overlap with sustainable development discourses</td>
<td>Wilma a bifurcation point. Development brings threats and opportunities. Cancun needs to change course</td>
<td>Development at a crossroads with environmentalists and developers.</td>
</tr>
<tr>
<td>Information networks</td>
<td>Internally fragmented, some personal links across Mexico and internationally</td>
<td>Personalised networks supported by personal and professional links across Mexico and internationally, but dispersed and with a very limited scope</td>
<td>Fragmented networks within private and public sectors. Universidad del Caribe may become an information processing centre</td>
<td>Many gaps &amp; limited sharing of information</td>
</tr>
<tr>
<td>Government administration</td>
<td>Young administration, but with no political or economic independence</td>
<td>Entrenched, short-term, scarce local support</td>
<td>Independent and relatively long time around, but much corruption and discontinuity</td>
<td>In formation, opportunity to create a local political class. Risk of ending up as in Playa</td>
</tr>
<tr>
<td>Private sector structure</td>
<td>SME sector lacks marketing and capital to diversity</td>
<td>SME organised and with family run long-term view</td>
<td>Well-organized, but dominated by corporations disengaged with the place</td>
<td>Family and locally based, but presence of some corporations and huge speculative pressures from external agents</td>
</tr>
<tr>
<td>Civil society structure</td>
<td>Atomised, emergent</td>
<td>Professional but few independent organizations and limited coordination</td>
<td>Professional and diverse, relatively independent but not well coordinated</td>
<td>Emergent, great potential but lack of commitment</td>
</tr>
<tr>
<td>Economic base</td>
<td>Fragile, dependent on cruise tourism</td>
<td>Some resilience from diversity in source and type of tourists</td>
<td>Strong but international and limited diversity. Vulnerable to the impacts of their own actions and to external crises</td>
<td>Solid and relatively autonomous, but very vulnerable to external opportunists</td>
</tr>
<tr>
<td>Cultural norms</td>
<td>Individualism, materialism, aspirational. A ‘frontier economy’, but environmentally sensitive</td>
<td>Individualism, materialism, place alienation. Described as the ‘American Dream’</td>
<td>Individualism, but a sense of local pride. Domination of ‘gringo values’</td>
<td>Mayan culture influence, high aspiration to achieve an alternative development as an ‘ecological frontier’ but there is also scepticism</td>
</tr>
<tr>
<td>Community structure</td>
<td>Diverse, fragmented, transient</td>
<td>Some cohesion but limited empowerment</td>
<td>Feeling of increasing disintegration</td>
<td>There is a cohesive core but eroded by rapid growth</td>
</tr>
</tbody>
</table>

Green indicates factors that contribute to adaptation; Red refers to factors that hinder adaptation; In black are ambiguous factors
## Changes Proposed by Citizens at the Regional Scale

<table>
<thead>
<tr>
<th>Structural Sphere</th>
<th>Diagnosis and Elements to Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate versus development discourses</td>
<td><strong>End with Double Discourse</strong> &lt;br&gt;The powerful speak about ecology and sustainability while at the same time combat laws to protect mangroves. Thus, on the one hand, they speak about the importance of nature protection while, on the other hand, despoil the forest to plant biofuels. This is a double discourse. Also, the government makes us believe that they are for conservation by inviting experts to speak about the environment, while at the same time approve projects that devastate crucial ecosystems and only benefit a few. The institutionalization of the double discourse take place when economic interests groups or political parties create their own NGOs in order to justify their own project and objectives</td>
</tr>
</tbody>
</table>

### Government and Administration
- Leave giving authority to the people who are not qualified to make complex decisions<br>- Create a culture of public service and never allow that the use of public power against the interests of the majority, specially in terms of “paying favours” to reach power<br>- Continue developing technical resources in order to professionalize the public services

### Structure of Private Sector
- Mexico, with all its cultural and biological diversity, does not need the concept of “all-inclusive” in order to attract tourists<br>- Entrepreneurs, and consumers, have to do an effort to offer, and demand, touristic products that are respectful with the environment and benefit local people. In this sense, the government must create adequate incentives to promote new products and help small and middle entrepreneurs

### Structure of Civil Society
- Acknowledge that social movements and networks are fragile and underdeveloped<br>- Build bridges and strategic alliances between the different groups of civil society and generate trust to overcome our continuous divisions<br>- Transform the challenge of the huge diversity of origins of Quintana Roo’s population into an advantage in terms of productivity and cultural development<br>- Stop manipulating NGOs as a “refuge” for ex-public officials or as a source of employment<br>- Create a sense of belonging and forms of identity linked to the Mayan people

### Economic Base
- It is fundamental to create a solid middle class, and a dignified working class, which includes construction workers<br>- Link the development of tourism with the development of social services and infrastructures<br>- Regulate the practices that deepen the exploitation of the least advantaged, such as *pagadoras* and other entities created to “reduce the costs” for developers

### Normas culturales
- Counteract the consumerist culture with other types of cultural values<br>- Promote autochthonous cultural elements (Mayan traditions, Day of the Death, local music bands, and son) so that “Miami” is not the “cultural point of reference”<br>- Subsidize local cultural groups that promote local values, but not only thinking in touristic consumption as in the case of X-Caret

### Community Structure
- Take very seriously the divisions existing between Maya and immigrants, and the discrimination towards women. The combat racial and gender discrimination should be a priority<br>- Learn from cohesive communities in the region such as Cozumel, Isla Mujeres and Puerto Morelos, and from the lessons learnt build a sense of community for the whole State

### Information Networks
- We need investments to generate high quality information, as well as networks for exchanging this information that are transparent, free, and depoliticized<br>- The official means of information and many of the Mass media generate more disinformation than information because they respond to specific interest<br>- Mexican research centres are producing useful information about reefs, mangroves, economic development and other issues. The problem, though is that politicians show little interest
Through a scientific project funded by the Economic and Social Research Council (ESRC), the Department of Geography of King’s College London is analyzing the adaptation and mitigation capacities to climate change of Quintana Roo’s civil society. This seeks to generate scientific knowledge to help humanity to build a more just social environment, with a better distribution of prosperity and less aggressive towards non-human beings.

Dates and location of the five workshops about climate change governance in the Mexican Caribbean:
- Playa del Carmen Workshop, 4 August 2008, Oficina 105 del Edificio Progreso
- Mahahual Workshop, 26 August 2008, Mahahual Primary School
- Tulum workshop, 24 September 2008, Charlie’s restaurant
- Cancun workshop, 1 October 2008, Universidad del Caribe, Cancun
- Regional workshop, 6 November 2008, Shangri-La Hotel, Playa del Carmen

Average occurrence (events per year) of climatic-related disasters in Latin America and the Caribbean

<table>
<thead>
<tr>
<th>Period</th>
<th>Climatic disasters</th>
<th>Storms</th>
<th>Floods</th>
<th>Droughts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970-1999</td>
<td>25</td>
<td>7</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>2000-2005</td>
<td>61</td>
<td>19</td>
<td>28</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Stern Review. Understanding the potential impact of Climate Change and Variability in Latin America and the Caribbean