

Content

1. Editorial
2. How to make vulnerable neighbourhoods resilient to natural risks?
The examples of Haiti and the Dominican Republic.
3. Notions concerning urban resilience.
4. How to adapt Cities to climate change and natural risks?
The example of Algiers.
5. Crisis simulation and preparation for a seismic disaster. The example of Lima, Peru.
7. War and flooding: the emergency response in South Sudan.
8. Publications
8. In brief



St Louis Beach, Marie-Galante

Risks and urban resilience, experiences of Southern cities.

In the urban sector as in many other fields, the topic of resilience is assuming an increasingly central role in the approaches and strategies of governments partnering urban development and of funders. As noted by the recent collective work "*Fragilités et résilience: les nouvelles frontières de la mondialisation*", the concept of resilience is now omnipresent in all debates and speeches about development, gradually replacing the almost exclusive leitmotif of the fight against poverty promoted since 2000 in the framework of the Millennium Development Goals (MDGs).

The city resilience approach has many advantages since it enables a holistic and interdisciplinary understanding of urban development. It interweaves economic views with other social sciences, takes into account all risks (natural disasters, wars and political crises) and makes it possible to pass "back and forth" between micro- and macro-economic levels (households, businesses, intermediate local authorities and states). Totally overhauling the "toolbox" and operational modalities of public aid for urban development, it draws together the thought patterns and actions of all players. It puts people back at the heart of the development process and avoids the imposition of universal standards of institutional, economic and social development. It highlights risk prevention and reduces the human and economic costs of disasters.

This issue of *Villes en Développement* outlines variants on these different aspects of urban resilience. Firstly, Youssef Diab examines the definition of the concept both spatial and time dimensions. Alexis Sierra details the conditions for simulation of crises and responses to an earthquake disaster in Lima, a metropolis of 10 million people. Eric Huybrechts analyses efforts by Algiers, which has already experienced numerous natural disasters, to adapt to the consequences of climate change. Lorba Drewry describes emergency responses in South Sudan, "young" country which has been independent since 2011, and particularly fragile and vulnerable to the risk of flooding.

Finally, Gaëlle Henry reports on the aid experiences of a funder, the French Development Agency (AFD), aimed at bolstering the resilience of vulnerable neighbourhoods in Haiti and the Dominican Republic. She places particular emphasis on the imperative nature "of a systematic partnership between public authorities and communities of inhabitants" if these projects are to be successful, a lesson which can easily be applied elsewhere including in our Northern countries. ■

Jean-Marc Châtaigner,
Directeur général délégué,
Former French Ambassador to Madagascar

1. "*Fragilités et résilience: les nouvelles frontières de la mondialisation*", dir. Jean-Marc Châtaigner, Editions Karthala, Paris, 2014.

How to make vulnerable neighbourhoods resilient to natural risks?

The examples of Haiti and the Dominican Republic.

Gaëlle HENRY, *Project Manager, French Development Agency.*

Port-au-Prince and Santo Domingo, at either end of the island of Hispaniola, have been regularly affected by cyclonic or seismic episodes in the course of their young urban history. The 2010 earthquake in Port-au-Prince, and its dramatic death toll, cast a harsh light on the fragility of Santo Domingo, particularly affected by the Sandy tropical storm in 2012. Its economic development should not be allowed to conceal a low standard of urban services and housing. The situation is particularly critical in the vulnerable neighbourhoods which host approximately 40% of the inhabitants of the two capital agglomerations.

Vulnerable neighbourhoods have been most affected by the 2010 earthquake and will suffer in the coming years from consequences of climate change and increasing episodes of regular landslides, cyclones and typhoons. Catastrophes and natural disasters in Port-au-Prince and Santo Domingo triggered new projects to benefit the most vulnerable areas from an environmental point of view where the greatest urban, social and economic hardship is also concentrated. AFD is supporting the Haitian and Dominican States in these initiatives, which will help to reform urban planning while making vulnerable neighbourhoods more resilient to natural risks.

In Haiti, the AFD is supporting the reconstruction of two neighbourhoods: Baillergeau and Martissant. The community of about 5,000 residents in Baillergeau, which is highly structured socially, had benefited from several projects to improve its living environment, including a drinking water supply project financed by the AFD with the metropolitan water authority (CAMEP), in partnership with the Research and Technological Exchange Group (Gret). The neighbourhood of Martissant, which is larger in scale (50,000 inhabitants), hosts a wide variety of urban situations, and has for many years benefited from the local development and social support actions of the Haitian Knowledge and Freedom Foundation (FOKAL). The project, led by the Housing Construction and Public Buildings Unit in charge of coordinating reconstruction policy, is implemented in partnership with the Gret and the FOKAL. It got off to a problematic start, partly due to the lack of a framework for urban governance prior to the disaster and the weakness of intervention practices of public authorities in vulnerable neighbourhoods. Like other reconstruction operations in the capital, the project faced the challenge of coaching individual initiatives for self-reconstruction in sites where the definition of non-constructible risk areas required the establishment of precise and enforceable urban regulations and rigorous and transparent land management. Despite the proliferation of experiments and innovations, the introduction of such planning practices and urban management and their sustainability remain to be consolidated in order to ensure the resilience of Port-au-Prince and its vulnerable neighbourhoods to natural hazards, and more broadly, to ensure the kind of sustainable urban development which permits achievement of the social and economic potential.



In Santo Domingo, the Sandy tropical storm in 2012 caused particularly devastating flooding for vulnerable neighbourhoods along the Ozama river, regularly covered with water up to 3 or 6 metres deep, especially in La Barquita, a neighbourhood of 7,500 inhabitants located in a bend on the river, where the rising waters tend to concentrate due to a siphon effect. The day after the flood, the Dominican State established a Commission for La Barquita responsible for finding a solution for the neighbourhood whose vulnerability to flooding would worsen under the impact of climate change. The Commission developed an integrated development project for La Barquita, which includes moving and relocating residents of the flood zone into a new neighbourhood, the Nueva Barquita. This project involves the promotion of new tools for planning and urban management, such as support and training of displaced communities to ensure sustainable resettlement and appropriation of their new living conditions. It is supplemented by environmental rehabilitation of the entire La Barquita neighbourhood: creation of a riverside park on the flood-prone area, rehabilitation of access and drainage networks for the neighbourhood, construction of new public amenities and establishment of a community management system for the waste management service. The AFD is financing the project, currently underway, which aims to be a pilot operation and a model for future urban renewal policy to benefit all the banks of the Ozama River. Driven forward by strong

presidential political will, the commission has the means to provide answers to the fall-out of uncontrolled urban growth and the disastrous environmental consequences. However, its reproducibility comes up against the scale of the phenomenon of insecurity and the need to reform the current urban governance of the metropolis, dispersed between municipalities with under-investment in human and financial resources.

In Santo Domingo as in Port-au-Prince, the main lesson of these projects is that the introduction of sustainable urban policies, helping to strengthen the resilience of the two cities to natural hazards, and improve living conditions in vulnerable neighbourhoods, will require systematic partnerships between public authorities and resident communities, which are often highly structured and supported by networks of dynamic local associations. ■

Notions concerning urban resilience

Youssef DIAB, director of studies at the EIVP engineering school in Paris and professor at the University of Paris-Est Marne-la-Vallée.

Resilience is a multidisciplinary and polysemic concept (Lhomme 2012) which means jumping backwards or rebounding. In physics and the mechanics of materials, this concept refers to the notion of returning to the initial state and characterises the material's ability to withstand impact or pressure. The semantic positioning of resilience in relation to the principles of elasticity, ductility and plasticity is not hard set in the scientific literature. The concept of resilience has been picked up in several disciplines, such as ecosystems or psychology. It now refers to the capacity of a system to adapt and organise in order to best cope with disruptions, whether ecosystems, social systems, economic systems or spatial systems, etc. The systemic approach of resilience fosters multidisciplinary approaches.

The concept of resilience has gradually taken on importance at major UN conferences. In Yokohama in 1994, the notion of vulnerability thus replaced that of hazards before being itself replaced by resilience in Hyogo in 2005! The Katrina disaster in 2005 crystallised a key moment of the paradigm shift in the epistemological approach and the consideration of urban risks (Diab, 2013 a,b)¹. It showed that urban resilience is not just the ability to find a new equilibrium in the wake of a disruptive event, that is to say, a state of a certain functional and temporal stability. It expresses, in particular, the potential of urban systems to renew and to reorganise by correcting past planning and engineering mistakes and especially to prevent any new disaster. In the case of Katrina, this required fresh scrutiny of dike maintenance, ageing protection structures, informal or poorly thought out urban planning and the lack of human and technical resources within local authorities, etc.

Vulnerability is not resilience

The vulnerability approach comes first. It aims to minimise damage and make socio-technical systems more resistant (Giddens, 1994 and Beck, 2001). Resilience is more positive because it considers protection strategies, crisis management practices and post-crisis approaches which are preventive, curative and, especially, creative and sustainable (Rufat, 2012). It takes into account the economic aspects and focuses on urban engineering. It also involves residents which play an important role in liaison with the culture and local history. Urban resilience can be analysed on different spatial scales, from the buildings to the neighbourhood and to the living area... but it is also analysed in time for post-disaster reconstruction. It is a process in which the effects of disruptions to their different scales of time and space are analysed retrospectively.

A proactive approach

Public policies relating to urban resilience cannot be reduced to the reactions of the state in the face of a disruptive event. In fact, the risk would arise of finding no local interface or available resources, or worse, favouring answers which diminish the local capacity to respond to a future disaster. It is necessary to intervene proactively on the factors comprising urban resilience: autonomy and adaptation, the diversity and flexibility of urban systems, collaboration and learning of urban players. It leads to simultaneous and integrated implementation of risk prevention, crisis management and sustainable urban development processes in the long term. Only this three-pronged approach will make it possible to build an urban system tailored to short-term (natural or industrial disaster) and long-term (demographic change, climate change) constraints (Toubin, 2014).

1. The EIVP engineering school in Paris promotes the theme of resilience as one of the defining lines of its research on the sustainable city. Several theses have been defended and national and European projects are underway.

How to adapt Cities to climate change and natural risks? The example of Algiers.¹

Eric Huybrechts, Architect and urban planner in charge of the international activities of the IAU IDF, a lecturer at the IFU (French urban planning institute), University of Paris Est/Marne-la-Vallée.

In recent decades, Algiers² has experienced natural disasters, among them the earthquake of Boumerdes (2003) or the floods of Bab el Oued (2001), which have resulted in numerous victims. Exceptional events have led government and local authorities to develop effective institutional coordination and crisis management methods for dealing with climatic events.



Algiers faces several types of risk: earthquakes, tsunamis, floods, coastal flooding, landslides, heat islands, reduced water resources, storms and forest fires. Although earthquakes are the main threat, climate change is exacerbating the impact of other natural hazards. This metropolis of 5.5 million inhabitants should see its population rise by 1.5 million by 2030 which will lead to a densification of the city and urban expansions contributing to increased urban vulnerability.

Exceptional events have led government and local authorities to set up institutional coordination and crisis management mechanisms. They proved effective for the climatic events encountered in May 2013, the vulnerability being greatly reduced by warning and relief coordination systems. Moreover, work to strengthen major infrastructures as well as consolidation of fragile constructions (old buildings in the city centre, the Casbah, slum clearance, rehabilitation of slums) have been undertaken.

In addition, preventive measures were introduced to strengthen the anti-seismic building standards or improve control of building permits by the specialised services. Areas sensitive to disasters were identified and taken into account in planning documents like the blueprint for the metropolitan area of Algiers, the Master Plan of Urban Planning and Development for the wilaya of Algiers³, the Strategic Plan of Algiers and the development plan for the Bay of Algiers⁴ and local land-use plans.

The analysis of major risks, conducted in 2003 and extended in 2010 took into account the new factors and data related to climate change. Although the results of a variation of the IPCC scenarios applied to the Algiers territory are sometimes in opposition, the trend remains an increase in temperature, frequency and duration of heat waves, a decreased water resources, a salinization of ground water due to rising sea levels, a coastal erosion weakening the dune ridges which protect against marine submersion, shrinkage of forests and increased flooding. The vulnerability is also increasing due to population growth and greater exposure of the population, rising economic activities, densification and urban extensions.

Around forty action sheets covering, proposals have been made on urban planning and development of public easements, regulations, prevention plans against natural hazards, strategic facilities and infrastructures, creation of an urban planning agency, training, reinforcing the plant structure in the city, scientific research on the city, the establishment of monitoring/evaluation tools.

Although the consequences of disasters are often impressive, their temporality raises questions. The effects of climate change are indeed long term. The probability of experiencing a major earthquake or major flooding during a political term of office is relatively slight. The terms of territorial planning, of the order of 10 to 20 years, are certainly longer than political timeframes, but are short compared to the cycle of the

most dangerous natural hazards (major earthquakes expected every 250 years, rare storms, etc.).

The result is an assessment of the costs incurred by the risks of natural disasters in the order of a thousandth of the urban or metropolitan annual GDP. However, to cope, the measures to be taken are proving very expensive. Preventive constraints are sometimes difficult to incorporate into territorial planning documents in light of major economic issues (land availability for new urban centres, business parks, business centres, large structural facilities, mass transport, etc.), or housing requirements. Politicians are often reluctant to make the necessary efforts during their terms of office in order to favour more tangible priorities for voters.

Take into account natural urban risks require a cross-cutting approach to urban planning, institutional coordination, risk assessment, infrastructure engineering, and economic and financial evaluation. The approach incorporating natural risks and climate change has an impact on the content of territorial planning

documents, brings into question the way in which the city is created and gives it a specific operational dimension, that of crisis management. It leads to a dilemma in the temporality of the management of territorial development issues. The establishment of institutional coordination mechanisms is very effective and less restrictive than the preventive measures in dealing with crises. ■

1. This article is based upon study made by Egis-Eau in partnership with IAU IdF, BRGM and Météo-France, funded by the Caisse des Dépôts et Consignations for the Algerian Ministry of Spatial Planning and the Environment.
2. Document being drafted by the CNERU and IAU IDF for the Ministry of Physical Planning and Environment.
3. Document prepared by Parque Expo, Portuguese urban development corporation for the wilaya of Algiers.
4. Document prepared by the Arte Charpentier architecture firm for the wilaya of Algiers.

Crisis simulation and preparation for a seismic disaster. The example of Lima, Peru.

Alexis Sierra,

Lecturer in Geography at the University of Cergy-Pontoise, UMR Prodig.

Lima, capital of Peru, national metropolis of 10 million inhabitants, is responsible for more than half of the national GDP and its real estate growth. Such a concentration of issues results in a risk when these people and property are exposed to major phenomena. But this coastal metropolis is located in the subduction area of the Pacific coast of America and therefore in a seismic zone. The possibility of disaster has become a genuine reality for the local and national society which is trying to make preparations.

In Lima, reducing exposure is unimaginable, unless only in dispersed fashion on sites considered particularly vulnerable (soft soils, major escarpments, etc.). The idea is to accept that a disaster could happen but it will result in the minimum of victims, the least possible damage and be quickly overcome. To this end, particularly since 2010 and the Chilean disaster of Concepción, national and local authorities have organised mock incidents and simulations. The first are *in situ* drills which involve the population. The second, exercises in a crisis room, bringing together those responsible for crisis management as planned for by the Civil Protection System (SINAGERD¹) and official protocols.

Simulations must be as realistic as possible. This is probably one of the biggest challenges: since 1746, when it was largely destroyed, Lima has not been directly hit by an earthquake. Although the modelling of seismic events, tsunami included, can provide some approximations, the resistance of buildings and amenities, the reactions of the population and various stakeholders are extremely difficult to identify and



Notice of what-if scenario



Picture credits: Alexis Sierra

Firefighter INSARAG

therefore to model. Past experiences elsewhere give us some insight which is then applied to the configuration of the city. Simulation scenarios are therefore based on the knowledge currently disseminated to authorities.

The study of these scenarios and their mapping translation tells us about how the authorities view the disaster. Several lessons can be learned, such as the fear of a general panic and a challenge to public order (through looting, escape of prisoners, etc.) and especially the identification of two types of territories considered problematic for the authorities: the self-built city of *asentamientos humanos* (urban settlements) and slums of the old central built-up zone (both historical centres of Lima and Callao port and their pericentre). In other words, the urban marginal areas. The preparation to the disaster therefore responds to two objectives: prepare part of the population to act autonomously and reduce marginal areas in particular by reducing the levels of informality and recovering old buildings occupied without a title of ownership.

These scenarios do not consider the modern and “consolidated” city exposed and the few measurements made by seismologists on buildings show that many of them fail to comply with standards. In other words, the chaos of the disaster is seen as a continuation of the incorrect development of the city, and disaster preparedness as a means of reducing informality and instilling a culture of risk, that is to say, imposing representation of a seismic disaster.

However, this population has a risk culture without viewing the earthquake as the main threat. Indeed, the inhabitants of margins, because they live in daily insecurity, because they are inhabitants generated by the crisis (several self-built neighbourhoods arose from a sudden displacement of hundreds or even thousands) have developed their own resources which can be called on in a major crisis. Mototaxis, loudspeakers, parallel support networks (particularly based on solidarity with the original region of the inhabitants) are used daily to offset the lack of public transportation, a telephone network or access to national support procedures. These local, flexible resources, which are often informal, arise from another form of making the city that does not correspond to the planned modern city.

They are therefore generally stigmatised in normal times as not conforming to the city, as not being city dwellers, as shown by the ban on circulation of mototaxis outside of the poor part of the city. The latter is one of resourcefulness. It may appear to be resilient to a seismic disaster. In fact, the current risk management policies are not intended to provide alternative means essential to this resourcefulness that would allow autonomous management (installation of hospitals, fire station, etc.) but reducing informality, to set a limit on urbanisation, to dislodge the inhabitants of certain buildings and distribute small emergency backpacks, which incidentally is not without value. ■

1. Sistema Nacional de Gestion de Riesgo de Desastre

War and flooding: the emergency response in South Sudan

Lorba DREWRY, *infrastructure coordinator for an NGO in South Sudan.*

In 2011, after a long process of secession, the 11 million inhabitants of South Sudan separated from Sudan to create a new landlocked country as vast as Texas. Since December 2013, this young country has been plagued by a civil war fuelled by ethnic divisions and political, social and economic grievances. This crisis has led to the suspension of many development projects and the launch of numerous humanitarian programmes to meet the most urgent needs, particularly in urban areas.

South Sudan is particularly sensitive to rainfall. Crossing the country from south to north, the Nile meanders into lowland swamps while branching into tributaries. South Sudan is subject to a tropical climate with alternation between dry and rainy seasons, marked in 2013 and 2014 by very heavy rainfall. *The vertisols*¹ of the plains and plateaus cover two thirds of the country. They harden and crack in dry seasons and block its infiltration in the rainy season.

South Sudan suffers from regular flooding and the villagers have set up, sometimes after many difficulties, mitigation strategies based on experience and knowledge of their environment. These strategies have resulted in villages being established on the highlands, buildings on stilts or elevation of housing areas on compacted earth platforms. These also include construction of dams and diversion of surface water networks and temporary displacement during the year from one bank of the river to the other.

The increase and intensity of climate hazards and consequences of the civil war have considerably heightened the vulnerability, restricted mobility and increased health risks.



Minkaman market

The flooded areas have received a large number of displaced people, victims of a new forced displacement. Indeed, the displacements resulting from the civil war affect about 1.4 million displaced persons within the country and nearly 500,000 refugees in Ethiopia and neighbouring countries. South Sudan has also taken in more than 250,000 refugees from North Sudan. Barely 10% of the displaced population have found refuge in the UN bases, the majority of them living in remote areas which are inaccessible during the rainy season.

For these displaced people, as for humanitarian players, the delivery of aid is a challenge for more than half of the year when most of the country is difficult to access from the supply centres.

The example of Minkaman

Located along the Nile, the small town of Minkaman saw its population increase within a few months from 7,000 inhabitants to more than 90,000 and the majority want to stay. Faced with this influx of displaced persons, the emergency humanitarian response was appropriate: three new development areas were created in satisfactory sanitary conditions, taking into account the needs of adjacent rural areas subject to flooding.

Water, sanitation, hygiene, education, health, food distribution and essential materials have been restored pending rebuilding or repair of the infrastructures. The humanitarian response to the 2013 crisis which focused on "saving lives" in Minkaman was a success.

However, logistical, financial, human and time constraints are real challenges for local authorities and humanitarian players. The integration of emergency actions in a global strategy of resilience, to ensure a continuum between relief, reconstruction and development, must deal with the implementation of programmes often determined on the basis of local considerations (political and social constraints).

The town of Minkaman is built in an area devoid of drainage and with no surface water management. The constructions hinder the natural flow of water, increasing the vulnerability of amenities, public spaces and markets. Emergency humanitarian actions in Minkaman were designed as a first step to be extended once the shock wore off. The potential of the city (quiet area of refuge) and the opportunities it holds (low density, public authorities heavily involved) are of great use. Taking into account the risk of flooding from the design stage, services and public spaces deployed in Minkaman during the emergency phase are favourable to the emergence of an urban "resilience".

Improvements are still possible. Strategies to mitigate the effects of flooding, commonly applied in traditional villages are, however, often absent in new agglomerations. Construction methods could be improved through bracing, insulation of walls and protection of structures from rising damp by capillary action. Flood risks should help guide the selection and planning of sites for development. The space allocated to sites for displaced persons and refugees, however, is often limited and this may lead to favouring of scalable solutions for regulating flows using appropriate techniques.

The arrival of the dry season in 2015 opened a window of opportunity to develop a dynamic of peace and resilience. It is incumbent upon the South Sudan authorities, supported by the players in international aid, to seize this opportunity for the benefit of residents. ■

1. Soil rich in clay.

Publications



Jean-Marc Châtaigner, *Fragilités et résilience*, Éditions Karthala, 2014. This collective and multidisciplinary [work](#) examines the approach of resilience, the limits of the concept and its operability. Case studies in sub-Saharan Africa and the Indian Ocean, Colombia and Haiti accompany this analysis.

Commissioner-General for Sustainable Development (CGDD), *Rapport Villes résilientes : premiers enseignements tirés d'une synthèse bibliographique*, September 2014.

Through the «Resilient Cities» programme, the CGDD, with the support of Cerema, provides tools and methodologies to build an urban resilience strategy. The first [report](#) is a reference system of theoretical and practical knowledge for urban players.



Zanuso, C. et al., *L'Évolution des conditions de vie en Haïti entre 2007 et 2012. La réplique sociale du séisme*, IHSI, DIAL, Paris, Port-au-Prince, 2014.

[The study](#), conducted in 2012 by the Haitian Institute of Statistics and Information Technology with the support of the UMR DIAL (IRD and Université Paris Dauphine) and the World Bank, provides a diagnosis of a disaster's impact on the Haitian territory.

In brief

Expertise France: a single expertise operator

[Expertise France](#), arising from the merger of six operators (FEI, Adetef, GIP Esther, GIP Inter, GIP SPI and ADCRI) was established on 1 January 2015. Expertise France supports its partners in implementing public policies in the areas of sustainable development, economic development, public finance, governance and human rights, social protection and employment, health, and issues related to stability, safety and security.

United Nations conference on disaster risk reduction

At the close of the 3rd United Nations conference on disaster risk reduction, held from 14 to 18 March in Sendai, a new framework for disaster risk reduction was adopted setting seven targets to be reached by 2030 so that this field contributes to sustainable development and the fight against the effects of climate change. More [d'information](#)

AdP dinner debates

On 5 March 2015 in Lyon, a dinner debate "Water in Africa, how the African local authorities make up new headways, permitted discussion of practices regarding drinking water and sanitation in Africa. Two speakers shared their experiences: **Claude Jamati** who oversaw the collective work *L'Afrique et l'eau*, and **Jean Paul Colin**, Mayor of Albigny-sur-Saône, Vice-President of the Metropolis of Lyon. Consult the [report](#).

AdP Day 2015

The next AdP day will take place on Friday September the 18th at the EIVP engineering school in Paris on the topic of the urban and peri-urban fringes of southern cities.



Villes en développement
Association de professionnels



This issue is published with the support of the Ministry of Foreign Affairs and International Development.

Publishing Director

Yves Dauge,
Co-Chairman of the *French Alliance for Cities and Territorial Development*

Editor in chief

Marcel Belliot
Villes en Développement
professional association

Editorial Board

Michel Arnaud, Pierre-Arnaud Barthel,
Xavier Crépin, Francine Gibaud,
Julie Salagnac Diop, Camille Le Jean,
Benjamin Michelon, François Noisette,
Françoise Reynaud, Irène Salenson

This issue was published in collaboration with Benjamin Michelon, Groupe Huit, and Xavier Crépin, Ministry of Foreign Affairs and International Development

Editorial office

French Alliance for Cities and Territorial Development
Expertise France
120, rue de Bercy 75012 Paris

Layout

Alex Pison

Subscription

4 issues annually for 20 euros

This newsletter is posted on the site of *AdP-Villes en développement*
www.ville-developpement.org