

DAM-INDUCED MIGRATION IN THE MEKONG REGION

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INTRODUCTION

All four countries comprising the Lower Mekong Basin – Laos, Cambodia, Viet Nam and Thailand – agree that “the social and political economy of resettlement [...] is one of the most serious strategic trans-boundary issues facing hydropower development in the area” (ICEM, 2010b: 192). Dam building on the Mekong is indeed at the heart of discussions at the Mekong River Commission (MRC) – the River Basin Organization institutionalized by the 1995 Mekong Agreement to foster cooperation over the shared river of the Mekong—level at present. This is due to the controversial decision of Laos in November 2012 to give the go-ahead to the construction of the Xayaburi dam, against the will of the three downstream riparian States. This dam, which would be the first to be built on the mainstream of the LMB, is indeed expected to bring important transnational socio-environmental consequences, among which important migration flows.

Studies of environmental migration in the Mekong region so far have focused on the linkages between climate change and human migration patterns in the Mekong Delta (Dun, 2009; ICEM, 2009; IOM, UNDP and CTU, 2012). On the other hand, hydropower developments in the region have been extensively studied but not with regards to environmental migration. Rather, the issues covered included security (Goh, 2004; Baker 2012), political-economy (Matthews, 2012), institutions (Ratner 2003; Hirsch et al., 2006), hydro-politics (Keskinen et al., 2008; Schmeier, 2010), common-pool resources (Fox and Sneddon, 2005) and impact assessment (MRC studies principally). This article is therefore an attempt to bring together these two bodies of literature so as to highlight the key features of dam-induced migration in the region. It is, above all, an attempt to raise awareness about this under-researched issue, an awareness

that is essential, both at the national and regional levels, if policies are to be adapted to protect these environmental migrants.

1. THE ENVIRONMENTAL CRISIS: HYDROPOWER SURGE IN THE MEKONG RIVER BASIN

1.1. The Mekong River Basin

The Mekong River, which is the tenth largest river in the world and the longest of Southeast Asia, is an international river originating in China and spanning all of the countries of mainland Southeast Asia except mainland Malaysia (MRC, 2005; Cronin and Hamlin, 2012). It is commonly divided between the Lower and the Upper Mekong Basins (LMB & UMB), the latter being comprised of the Chinese and the Burmese parts of the River. This division makes sense both from a hydrological point of view since the Upper Mekong Basin comprises most of the river's descent from over 5,000 metres above sea-level (Baker, 2012), and from an institutional point of view as neither Myanmar nor China have ever accepted to be part of the MRC regime. The present paper focuses on the LMB only, as this is the area of the Basin covered by the MRC mandate, where cooperation and policies strategies may therefore be planned realistically. As far as hydrological cycle is concerned, the most important characteristic to point out, aside from the Southwest monsoon affecting the region, is the special functioning of the Tonle Sap Lake in Cambodia, which fills up and empties in the Mekong according to the seasons. This accounts for most of the extraordinary biodiversity of the river, which is considered to be the second most biologically diverse river following the Amazon. It is, subsequently, essential to the food security

of an estimated 65 million people, whose livelihood is mostly based on fisheries and agriculture. More precisely, it has been estimated that more than 60 per cent of the economically-active population have a job that is vulnerable to changes in the river's hydrology (MRC, 2011). For a long time, the Mekong remained a worldwide example of an untapped, free-flowing river, as no dams had been built on its mainstream (Fox and Sneddon, 2005).

1.2. Projected dams on the mainstream of the Mekong

It was not until 1993 that China completed its first dam on the Upper Mekong mainstream. The 1,500 megawatt Manwan dam was in fact the first of a series of eight planned mainstream dams (cf. Figure 1), known as the Lancang cascade (Goh, 2004). The total planned installed capacity is of about 14,000 megawatts and the cascade is to capture an estimated 40 billion cubic metres of water from the river (about the same amount as the Three Gorges Dam) (Baker, 2012). So far, four of these mega-sized projects have already been constructed (Cronin and Hamlin, 2012). However, none of the 11 planned mainstream LMB dams has been completed yet. Xayaburi, as explained in introduction, is the only project under construction at present. The planned cascade includes eight more dams in Laos and two additional hydropower stations in Cambodia. If these were to be built, 55 per cent of the river between Chiang Saen, Thailand and Kratie, Cambodia would become a reservoir (Baker, 2012). While these plans on the LMB mainstream are quite recent, damming the tributaries of the river, however, is not new on the agendas of the MRC member countries.

1.3. Building dams on the tributaries of the Mekong – power surge in Laos

“Becoming the ‘battery of Southeast Asia’ through exploiting its hydropower potential has been a longtime dream of the Government of Laos (GoL) and its backers” (Lawrence, 2008: 13). This is why the present paper focuses on Laos when it comes to the study of tributary dams. Laos’s “hydro-boom” (Ibid.) started in the 1990s with the signing of numerous Memorandums of Understanding (MoUs), both with foreign hydropower developers (23 MoUs signed with Korean, Australian, European and North American corporations) and with the Thai and Viet Namese governments (to export a total of 5000 MW by 2020) (Ibid.). The Asian financial crisis of 1997 ended this race to hydropower, and it was not until the signing of the Nam

Theun 2 Purchasing Power Agreement (PPA) in 2005 that foreign hydropower developers rushed back to Laos. This marked the beginning of a new power surge in Laos: it has been estimated that there are currently 16 dams on the Mekong tributaries with nine under construction, another 18 at the planning stage and 29 at the feasibility stage, as shown on Figure 1 (Ministry of Energy and Mines 2013). Christopher G. Baker goes so far as to speak of a “hydropower gold rush” since regional state-owned enterprises from China, Laos and Viet Nam are competing with foreign investors from France, Korea, Japan, and Norway for the hydropower resources of the basin (Baker, 2012: 5).

1.4. The environmental crisis

It is generally acknowledged that a dam has important consequences both upstream of the reservoir, by flooding an important area of the basin, and downstream, by modifying the hydro-morphological regime of the river (both the hydrology and the transport of sediments). The latter type of effects brings about important modifications in the ecosystems of the river, which in turn affect fisheries and agricultural patterns of the basin. In the case of the Mekong, both of these activities are essential to the livelihoods of millions of people in the basin. This is especially exacerbated in two key zones: (1) the Tonle Sap Lake (cf. part 1.1); (2) and the Mekong Delta, which is also known as the “rice bowl of Southeast Asia” and is responsible for half the national rice production of Viet Nam (Lisandre, 2011).

Upstream consequences bring what will hereafter be called direct consequences in terms of migration patterns in the region, i.e. the resettlement of entire villages out of the flooded areas. These population movements are planned, short term and local. Indeed, construction companies, before the actual construction phase of dams, plan and organize the resettlement of the flooded households in areas close to their original villages. On the other hand, downstream consequences are expected to generate long term indirect migration flows, due to the above mentioned modifications in terms of river-based activities. These are expected to be especially important due to the cumulative effects of all tributary and mainstream dams. They are trans-boundary by nature and difficult to predict precisely. That is why the adequate scale of study for such effects is regional and long-term.

2. KEY DAM-INDUCED MIGRATION FLOWS

2.1. Direct consequences of dams on migration flows: resettlement patterns in the Mekong region

Direct dam-induced migration flows may be divided up into two broad categories: (1) out-displacement induced by forced resettlement in the area flooded by a reservoir; and (2) in-migration due to direct job creation in the dam area. In the case of the LMB, it has been evaluated that direct job creation resulting from the 12 planned mainstream dams should generate an estimated USD 7.9 billion in wages (ICEM, 2010: 53). Moreover, it is interesting to note that “much of the labour (especially for skilled and semi-skilled jobs) is likely to be imported from surrounding countries other than the host countries (especially Viet Nam and China)” (Ibid.). This article focuses however on population movements that followed the resettlement process. Resettlement being a local issue, specific to each dam, the same distinction as in the preceding part, between mainstream and tributary dams, is made here.

Planned mainstream dams

Regarding the planned mainstream dams of the LMB first of all, a strategic environmental assessment (SEA) of hydropower on the Mekong mainstream was carried out in 2010 by the International Centre for Environmental Management (ICEM) for the MRC. The SEA team reviewed existing secondary data sources in the region and estimated to 63,112 the total number of people that would be displaced, should the cascade of 12 mainstream dams be constructed in the LMB. The dams that are expected to account for most of the resettlement are Luang Prabang; Stung Treng and Sambor, as shown in Table 1 below. These figures are probably an underestimate and are expected to rise given more precise data from the developers (ICEM, 2010a).

One of the most problematic issues at stake here is the one of “double jeopardy” (ICEM, 2010a: 111), which designates the fact that some of the villages displaced by mainstream projects have already been forcibly displaced once or twice within the past decade. This is the case of some of the households of Ban Houay Xong, in Nan district, one of the potential districts affected by the Xayaburi dam, for instance: displaced from the uplands to the lowlands in the mid-1990s, these households were forced to relocate themselves seven years after the first displacement, without any

governmental support, due to repeated floods in the lowlands (ICEM, 2010a). The main issue resulting from these repeated relocations is the impoverishment of these communities, who have been identified as being among the poorest segments of society (ICEM, 2010b). The ICEM team even stated that frequent forced hydropower-related displacement is “one of the most impoverishing acts that can occur to communities” (ICEM, 2010a: 111).

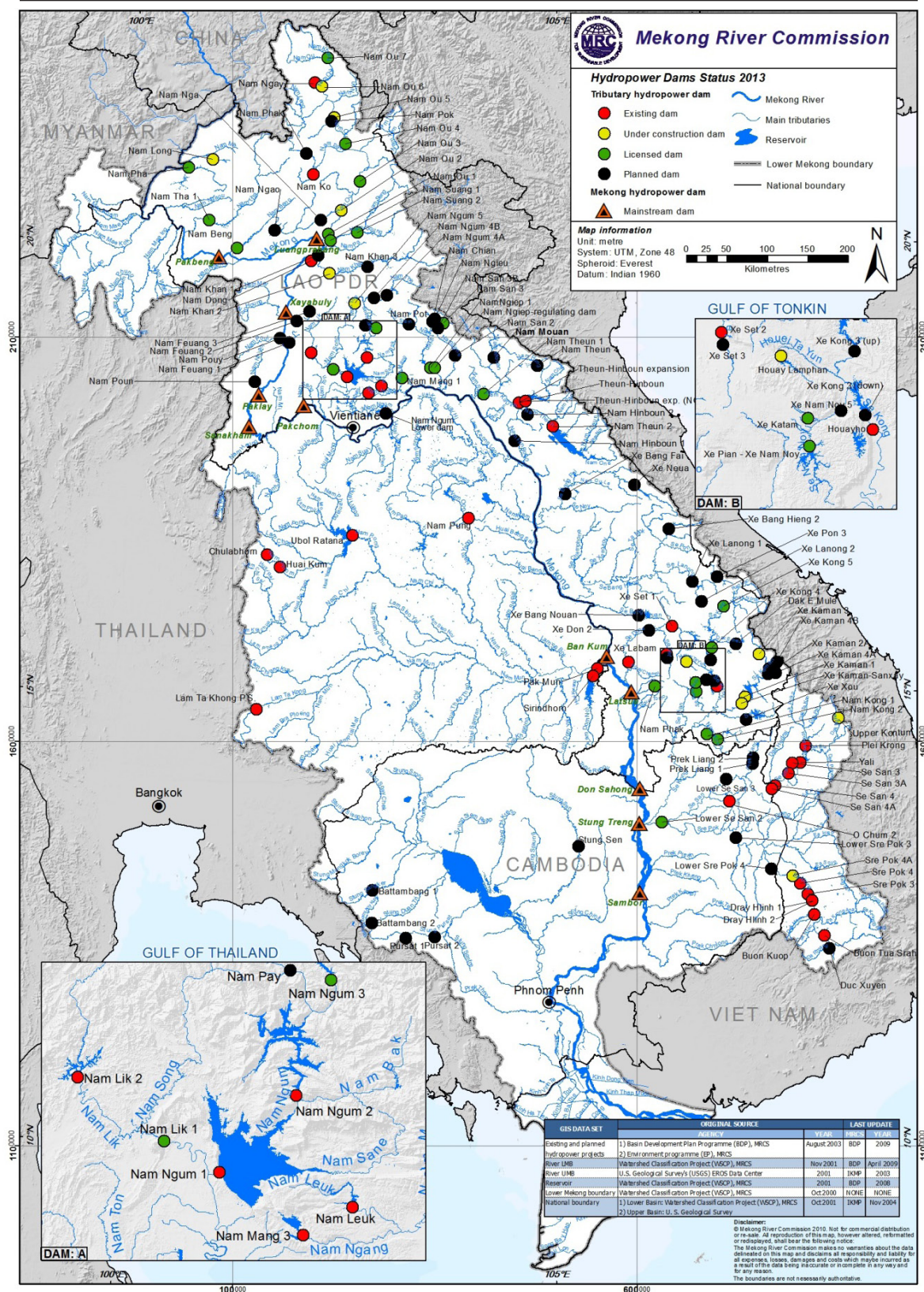
Laos’ planned and constructed tributary dams

According to the Hydropower Database of the MRC, the total number of people displaced by Laos’ tributary dams is 69,413, with an average of 868 persons displaced per dam. Again these figures are probably an underestimation of the reality, as there are currently no data available for 13 of the Laotian tributary dams. The precise numbers of people displaced per dam are presented in Figure 2 below.

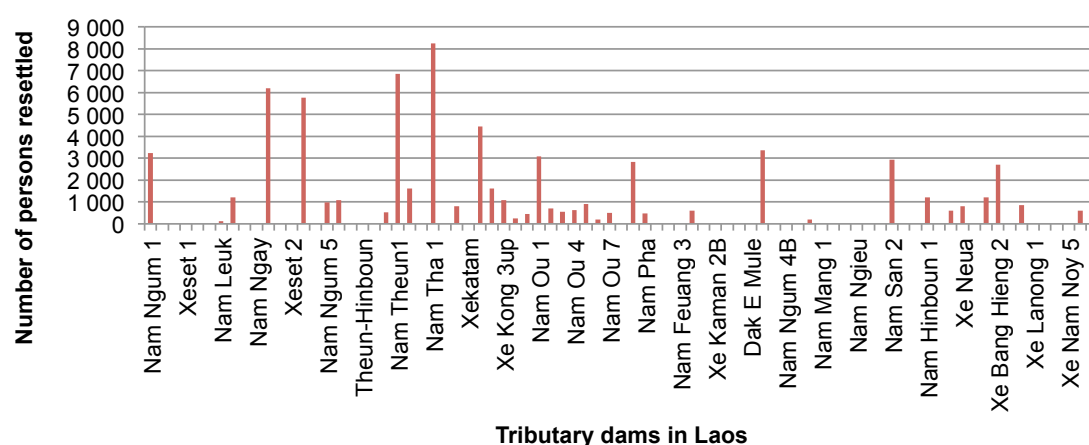
Concerning the evaluation of the resettlement process in Laos, International Rivers, an NGO that protects rivers and defends the rights of communities that depend on them, highlighted some major concerns in an extensive study conducted in 2008. Among these are the facts that lots of ethnic minorities are being resettled and some of them have been resettled more than once already (see double jeopardy issue explained above). There is overall a lack of information disclosure regarding the process and a lack of opportunity for the displaced populations to voice their concerns; and the quality of resettlement programs is rather low (Lawrence, 2008). The micro-level case study of the Theun Hinboun Expansion Project presented below helps to get a more in-depth understanding of the process.

This is a particularly interesting project as it was funded by a national agency (the Theun Hinboun Hydropower Company, which is a consortium of companies in which Electricité du Laos owns 60% of the share) and therefore shows the normal resettlement process in Laos. The project involved building a storage dam on the Nam Gnouang River and doubling the capacity of the existing Theun-Hinboun power plant (Lawrence, 2008: 40). It required the resettlement of approximately 4,000 people (THPC, 2011). The resettlement programme has been evaluated as effective overall (ICEM, 2011), especially since the Theun Hinboun Hydropower Company gave special attention to livelihood development, public involvement, public health and education, and ethnic minorities (THPC, 2011). Despite these efforts, some salient issues have been highlighted, among which: (i) the absence of commitment to provide land-for-land

Map 1. Map of the tributary hydropower dams (circles) either built (red) or under construction (yellow); or licensed (green); or planned (black); and of the mainstream dams (triangles).



Source: MRC Hydropower Database.

Figure 1. Number of people resettled by Laos tributary dams

Note : Only the dams where figures were available have been included (13 additional tributary dams have been constructed). Source: author; with data of the MRC Hydropower database.

compensation (Lawrence, 2008; Matsumotos, 2008; Imhof, 2008); (ii) a lack of productivity of the replacement land for the resettled (Lawrence 2008; Imhof 2008). This is particularly clear in a study of the MKI project in Phoumarkneng village, a relocation site where five villages merged into one due to the building of the dam (Bénézit et al., 2013). It demonstrated that the resettlement site was subjected to an overexploitation of non-timber forest products resources and of fish resources, while relocated people were generally not self-sufficient in rice and vegetable production. The main explanation accounting for these findings is that the land provided for compensation was of lower quality than the former one.

One of the fiercest criticisms against the THXP resettlement process is the lack of consideration for the downstream communities also impacted (ICEM, 2011; FIVAS, 2007). Indeed, downstream impacts of dams may induce further forced displacement, often not taken into account by the hydropower firms. These impacts are bound to be even more important and to bring even more migration flows, if considered cumulatively.

2.2. Indirect consequences of dams on migration patterns: long-term ecosystem modifications

Causal linkages between dams and long-term forced migration

The MRC has undertaken extensive work on the future socio-economic impacts of dams on the Mekong (ICEM, 2010a, 2010b; MRC, 2010). Our contribution to this work is to reconstruct the causal links potentially leading to forced migration

in the future. The results are shown in Figure 3. It is important to note that the diagram only accounts for the operating phase of the dams. The construction phase is bound to have some migratory effects as well, but these are likely to disappear after the 15-20 years of construction. It is also essential to reaffirm the fact that both the tributary and the mainstream dams, constructed and projected, are taken into account in this part since indirect migration flows are most likely to occur due to the cumulative effects of dams.

From the diagram, it appears that the two key push factors of forced migration are the changes in agriculture and in water-related activities, especially in fisheries. Both are directly related to food security, the main triggering factor of dam-induced displacements for Baker (2012: 20), along with water security issues: "Continued LMB hydro-development will result in strong push factors that come from the problems associated with food and water scarcity issues". Water security also appears in our diagram, under the more general category of human health and security issues, as having a significant impact on the decision of affected households to leave.

As for pull factors, the main one is the increase in electricity provision, should the electricity produced by each dam be directly connected to the dam area. In the case of the main regional dam builder – namely Laos – though, most of the electricity produced is sold to Viet Nam, Thailand and China (Hribernik, 2012). This may therefore change electricity generation into a push factor in favor of rural exodus. Still, it has to be noted that electricity exports to neighboring countries will be bound to bring economic development to Laos. Depending on the management of such economic

development, especially whether it is used or not towards dams' areas, the situation might be reverted again and electricity generation turned once more into a pull factor. Assuming that push factors are more important in amplitude than pull factors, the rest of this section focuses on out-migration patterns rather than on those related to new migration into the area.

A key question to answer to, beforehand, is whether or not further migration is likely to occur in the region. The answer seems to be affirmative since increasing proportions of the LMB population have been shown to move across national and international boundaries (ICEM 2010a).

Identification of dam-induced-migration hotspots

Intuitively, the two zones which are bound to be the most strongly impacted by the different development projects in terms of migration are the Tonle Sap Lake and the Mekong Delta, as the primary fisheries and rice production areas respectively (Baker, 2012). In order to make a more precise assessment of the situation, the assumption is made that the most vulnerable sites are the ones where displacements are the most likely to occur in the long run. Vulnerability, which is defined as "the degree to which a social group is likely to experience negative effects due to exposure to changes in its environment" (MRC, 2010: 14), is a function of "exposure", "sensitivity" and "resilience to change" (MRC, 2010: 14). Exposure is essentially measured by the location of people relatively to the environmental changes, while resilience may be assessed via the existence of alternative livelihoods for affected households. The concept of sensitivity is closely related to the one of dependency on natural resources affected by the changes (Ibid.). For the sake of simplicity, dependency will be considered as a good proxy for sensitivity.

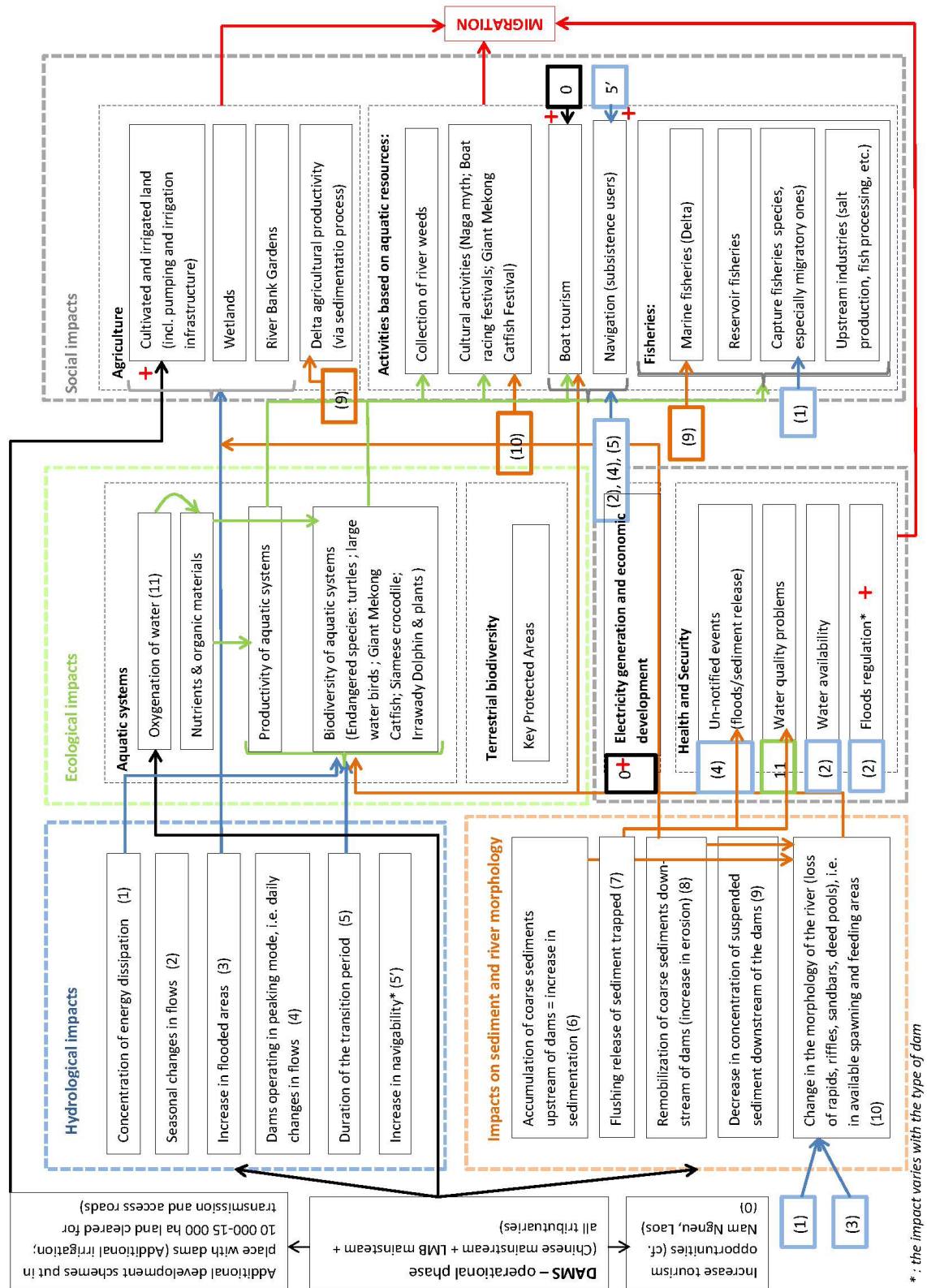
The concept of exposure helps to identify, on top of the Tonle Sap Lake and of the Mekong Delta, two additional highly vulnerable sites (Hall and Bouapao, 2010; MRC, 2010): (i) the Siphandone stretch of the Mekong (Southern Laos), in an important fishing migration area prone to extensive dam building; and (ii) the Chiang Rai area, given that in the northern Thailand all the rivers are still connected to the Mekong and therefore likely to be highly impacted by any dam-induced changes. The MRC vulnerability assessment of the basin (Hall and Bouapao, 2010) then goes one step further and shows that the Tonle Sap area is the most vulnerable zone, followed by the Siphandone zone. The Thai side of the mainstream and the Mekong Delta to a lesser extent are less vulnerable to

development plans. How can this classification be justified?

The study of the four respective national economic contexts provides for a first baseline vulnerability assessment of the region. Indeed, it has been proved that "resource users living in supportive environments (with strong economic links, well-developed infrastructure and social services) would be less vulnerable to changes in water resources availability than those living in less supportive environments" (Hall and Bouapao, 2010: 4). Laos and Cambodia both face multiple challenges in providing a supportive environment for their respective populations, contrary to Thailand and Viet Nam which both offer satisfying economic growth and access to basic services to their populations (Hall and Bouapao 2010; MRC 2010). Therefore, the Tonle Sap and the Siphandone areas are likely to be more vulnerable to changes in water resources than the Mekong Delta and the Chiang Rai area.

The concepts of dependency and resilience, taken together as they are closely related, allow to go one step further in the classification. The results of interviews carried out during the MRC vulnerability study (Hall and Bouapao, 2010) in the four above mentioned areas show that nearly 33 per cent of the Cambodian households, when asked what their second most important livelihood occupation was, answered that they had none, contrary to Laotians households, 57 per cent of whom answered "fishing". Full-time fishers are rare in Laos, where the primary economic activity is agriculture (MRC, 2010). These findings show a very high level of vulnerability of the Cambodian households near the Tonle Sap Lake as they have no livelihood alternative, should their primary occupation – fishing – be threatened. The Tonle Sap area is thus more vulnerable than the Siphandone zone. The dependency of households on fish, as shown in Table 2 below, further confirms this pattern. It also enables to classify Thailand and Viet Nam's studied areas: with twice as many people being highly dependent on fish and other aquatic animals as compared to Chiang Rai, the Mekong Delta is more vulnerable to any change in the river.

Figure 2. Causal linkages between dams and human migration flows.



Note: If there is no "+" red sign indicated, the impacts are assumed to be negative. Source: Author.

Table 1. Assessment of household's dependence on fish and other aquatic animals by study site

Level of dependence	Cambodia study sites	Lao PDR study sites	Thailand study sites	Viet Nam study sites
Low	21%	17%	45%	59%
Medium	42%	68%	45%	29%
High	22%	14%	8%	9%
Very high	15%	1%	2%	4%

Source: Hall and Bouapao, 2010: 126

Concerning the distributional impacts of dams, or what may be called the *social hotspots* of migration, most studies agree that the impacts “related to the loss of agricultural land (...), off-shore fisheries and flood plain agriculture (...), are likely to fall more heavily on poorer groups” (ICEM, 2010a : 60). This finding is further confirmed by the fact that the poorest segment of the population in the basin is much more dependent on fisheries for their livelihoods than higher income groups: in Cambodia for instance, “75 per cent of the poorest quintile catch fish (and seafood) as part of their livelihood compared to only 17 per cent of the richest segment” (MRC, 2010: 40).

Main destinations for the migrants

Two main types of migration in the LMB have been identified (ICEM, 2010a; Baker, 2012): (i) rural to urban migration; and (ii) migration to Thailand from neighboring countries, especially from Laos and Cambodia. Consequently, a probable destination for the farmers and fishermen from the Tonle Sap Lake and the Siphandone area might be the main migrants’ receiving cities in Thailand, namely Bangkok and to a lesser extent Chang Mai (Promburom and Sakdapolrak, 2012; Baker, 2012). Nonetheless, international migration is not the migrants’ first choice, and “rural-urban migrants usually move within their own country before moving across borders” (Baker, 2012: 22).

Within Viet Nam, first of all, there has been an increase in rural-urban migration since the mid-1990s (Viet Khoa et al., 2012). Among the main in-migration cities are: Ho Chi Minh City, Ha Noi, Hai Phong and Da Nang (Ibid.). Regarding the Mekong Delta more specifically, “trends continue to show movement of migrants from the rural Mekong Delta towards urban centres, industrial parks and rapidly developing high-growth provinces in the Southeast and Central Highlands of Viet Nam” (Dun, 2009: 9). As far as Thailand is concerned, rural-urban migration has increased since the 1960s, with Bangkok being the main destination (Promburom and Sakdapolrak, 2012) along with Chiang Mai. As for Laos, the main receiving area is Vientiane Capital followed by Borikhamxay,

Vientiane, Luangnamtha and Bokeo provinces (Kabmanivanh Phouxay, 2010). It appears, however, that most of the people arriving to these places come from northern provinces, while the majority of the migrants originating from southern provinces are more likely to move to Thailand than to Vientiane (Ibid.). Thus the majority of migrants coming from the Siphandone area would likely go to Thailand receiving urban centers. Finally, when it comes to Cambodia, it has been assessed that migration flows are essentially rural-to-rural (Maltoni, 2007). Rural-urban migration, even though less important, still exists with the main urban centers of in-migration being Phnom Penh, Koh Kong, Battambang, Siem Reap, and Banteay Meachey (MRC, 2010). Moreover, internal migration is rather short-range (Maltoni, 2007), and when inter-province migration occurs, this is from “the more densely populated provinces in the south and west to the more sparsely populated provinces in the north-east” (MRC, 2010: 33). All in all, it seems that the population from villages around the Tonle Sap would migrate primarily towards other villages in close and sparsely populated provinces, before moving to the above-mentioned urban destinations.

Concerning the amplitude of these potential migration flows, Baker (2012) identifies three potential scenarios (cf. Figure 4). The policy implications of these different scenarios are incremental and vary from the mere need of policies tackling unemployment and inflation increase in receiving areas in the first scenario to the necessary resort to international aid in the third case (Ibid.).

3. MAIN GAPS IN POLICY RESPONSE BOTH AT THE NATIONAL AND REGIONAL LEVELS

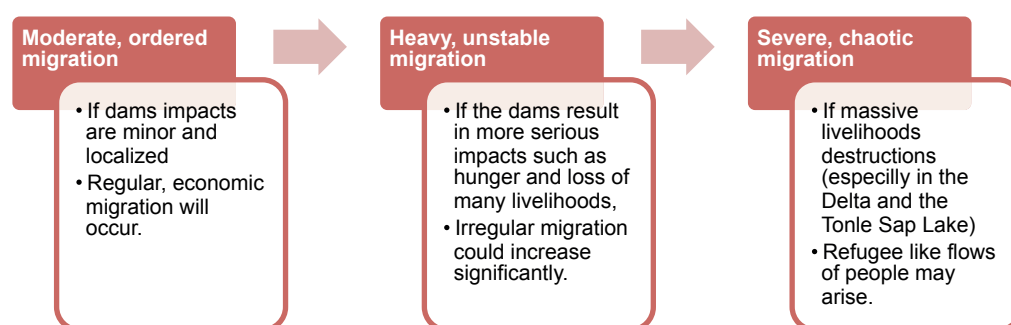
3.1. Lack of protection of resettled people in the national legal and policy frameworks

Preliminary assessment of the LMB countries’ respective resettlement frameworks

“Numerous gaps remain in land acquisition and compensation policy and procedure compared to international best practice for all LMB countries” (ICEM 2010b: 192). Lack of political will and human capacities have been identified as other obstacles to a socially equitable resettlement practice (Ibid.).

The main issues include:

- Inadequacy of the overall Environmental and Social Impact Assessment (EIA) process (ICEM,

Figure 3. Three potential migration scenarios

2010a: 106): in Cambodia for instance, a clear “lack of political commitment for the role of EIAs in development decision-making” has been identified, along with a lack of capacity within the Ministry of Environment to critically review the EIA findings (Suhardiman, de Silva and Carew-Reid, 2011: 93);

- Limits of national capacities to implement the respective national social and environmental guidelines, especially on hydropower planning and monitoring (ICEM, 2010a);
- Insufficiency of budget funds allocated by hydropower developers to social and environmental safeguards (ICEM 2010a);
- Barrier of land management to a sound resettlement management: as most rural lands do not have any legal title, rural communities are often in a weak bargaining position vis-à-vis hydropower developers’ interest in terms of land concession (Ibid.; ICEM, 2010a: 106);
- “Legal pluralism” (Suhardiman, de Silva and Carew-Reid, 2011: 131), whereby hydropower development is managed by different government agencies operating in more than one legal order (Ibid);
- Lack of public participation in hydropower decision-making: public participation, if any, mainly occurs at the project level regarding mere procedural matters (Suhardiman, de Silva and Carew-Reid, 2011).

Focus on Laos’s hydropower legal and institutional framework

An extensive legal and policy framework in Laos has been developed, especially over the last decade, on environmental and water management. Moreover, “in the lead-up to Nam Theun 2’s approval, the World Bank, the ADB and other donors worked with the GoL to establish social and environmental laws and policies to guide hydropower development in the country” (Lawrence, 2008: 18). These different documents include provisions to ensure

participation of local populations and livelihood improvement for resettled communities – rather than mere monetary compensation – with special attention being given to ethnic minorities (Nam Theun 2 Project, 2005). In practice however, these provisions are either not enforced or implemented on an ad hoc basis (Lawrence 2008).

A thorough analysis of the legal and institutional frameworks of the different sectors related to hydropower – namely the water, land, environment, energy and resettlement sectors – is necessary to provide an explanation for such a gap between these legal and institutional frameworks and the reality on the ground. Such an analysis has been completed by Suhardiman, de Silva and Carew-Reid (2011), the results of which are summarized in Chart 3 below. In a nutshell, it appears that the current legal framework is giving too much responsibility to project owners regarding the resettlement process, while the main regulatory bodies over land and water resources lack authority to effectively monitor the hydropower projects. This is explained by the underlying rationale of the GoL who is encouraging private investment in the country to boost its economy.

As far as the hydropower decision making process is concerned, it seems that the Ministry of Environment and Mines (MEM) bases its decision to undertake the building of a dam essentially on the project’s economic feasibility. The EIA has to be approved as well but only by the Water Resources and Environmental Administration (WREA), which in practice has less bureaucratic power than the MEM. Another issue is the one of the discrepancy between the respective positions of national level and provincial level authorities regarding resettlement and compensation issues. This is an important obstacle to a sound resettlement practice since each power company, after having obtained the national authorities’ approval for their respective projects, has to negotiate again with provincial authorities about the resettlement issue at the

implementation phase of the project. The main explanation for such an inconsistency between national and provincial level authorities is the absence of a “connected multi-level regulatory system” (Suhardiman, de Silva and Carew-Reid, 2011: 42) in the hydropower development sector.

3.2. Lack of awareness and authority to deal with indirect long-term migratory consequences of dams at the MRC level

Contrary to the issue of resettlement in the flooded area, which is local, indirect migration flows arise from the cumulative effect of all tributary and mainstream dams. As such, they are a trans-boundary issue by nature, which should therefore be addressed at the MRC level. Currently, there is no clear framework for dealing with such trans-boundary issues, as “they raise issues of accountability that none of the LMB countries have previously had to address” (ICEM, 2010b: 199).

A lack of awareness?

The main obstacle to the establishment of such a framework is the lack of awareness of such issues on the part of the MRC. Although the MRC framework also presents the issue of social consequences of dams in terms of direct and indirect impacts – referring respectively to losses of livelihood resources and to the remaining impacts such as new employment opportunities, cumulative loss of livelihood related activities, health risks and water pollution – it does not encompass the issue of population movements (ICEM, 2010a).

But rather than a lack of awareness as such, it would be more accurate to speak of a restricted mandate of the MRC. Indeed, employees of the MRC Secretariat are well-aware of the migration issue. The main reason why the latter is not discussed officially is that it is not part of the official MRC agenda. The MRC is indeed focusing on water-related issues in a narrower sense. For the issue of migration to be included in the MRC mandate, there needs to be a consensus and a collective request from the four member States. This is unlikely to happen given the current regional setting, but even if it were the case, the question remains of what the MRC could potentially do.

A lack of supra-national power

Given the current practices of the MRC when faced with other social effects of dams in the region (Hall and Bouapao, 2010), it is probable that the institution would adopt a mitigation

strategy towards migration flows. In a sense, it is already doing it indirectly, through the mitigation of other effects of dams: by limiting the impacts of dams on fish migration and sediment transport for instance, the MRC is indirectly helping in diminishing human migration flows.

Another key area where the MRC could potentially act is by extending its data and knowledge on the subject. In reality, “the use of knowledge to make better decisions is at the heart of the MRC’s governance role (...). Producing scientific knowledge (...) is both its unique strength and an essential foundation for providing disinterested scientific advice to governments, international institutions, project developers and (...) other river Basin stakeholders” (Hirsch et al., 2006: 120-130). The MRC programme the most closely related to social sciences is the Basin Development Plan, which aims at ensuring that the use of the Basin’s natural resources contributes to sustainable economic development. Currently dealing with issues such as employment and food security, it might easily encompass migration as well.

The real impact of such actions remains to be seen, as the MRC has no supra-national authority over its member States. It is and remains an inter-State body with no supra-national authority (Cronin and Hamlin, 2012), a governed organization rather than a governing one (Hirsch et al., 2006). Many observers – especially civil society groups – consider this as one of the main MRC’s weaknesses and expect it to “intervene in its own right to address concerns or resolve grievances” (Lee and Scurrah, 2009: 20). Furthermore, the MRC also lacks the power to influence the four LMB countries’ respective policies: considering the sensitivity of water-related issues, there is little if no chance that the MRC may influence in any way the respective national migration policies of its member States or the signing of a multilateral migration agreement between them.

Even though the MRC did have such a power, the outcomes of such discussions would likely be threatened by two external actors. Firstly, China, a non-member of the MRC, is building eight mainstream dams on the upper reach of the Mekong where the MRC has no authority whatsoever. As one of the main investors in the new waves of dams in Laos, the country is also pushing for rapid hydropower development in the LMB with little concern over socio-environmental issues. The prospects of improvement of the situation are rather pessimistic since China, as both an upstream riparian (able to reap all the benefits of increased hydropower and export most of the social and environmental consequences) and the economic leader of the region, is not likely to accept to become part

Table 2. Summary of the assessment of the existing legal and institutional hydropower framework in Lao PDR.

Sector	Main legal texts	Main issues impeding sound resettlement practices
Resettlement Legal and Policy framework	Decree on Compensation and Resettlement of People Affected by Development Projects (STEA, 2006); Regulations for Implementing Decree on Compensation and Resettlement of People Affected by Development Projects (2006)	This legal framework gives project owners the full responsibility to conduct the overall resettlement process. The main problem is therefore one of conflict of interests. This is especially problematic given that there is currently no clear definition of any mechanism in place to monitor the projects' owners conduct.
Energy Legal and Policy framework	Electricity Law (1997, 2010); Power System Development Plan (2004); National Policy on Sustainable Hydropower (2006); Renewable Energy ; Development Strategy (2010)	The rationale of the GoL is to encourage private sector investment in hydropower development to promote economic growth. This is the main reason why the rationale to regulate or plan is most often side-lined, and why the resettlement framework gives so much responsibility to the project's owner.
Water management Legal and Policy framework	Water and Water Resources Law (1996); National Water Resources Profile (2008) Draft National Water Resources Policy (2010)	The analysis of this sector may provide an explanation for the difficulty to monitor hydropower projects. Indeed, the different texts define a regulatory body (WREA) in charge of regulating the different water related activities. Yet, it is also clear from these texts that this body lacks the authority to effectively monitor the different hydropower projects. In practice, there is a clear lack of inter-ministerial/cross-sectoral coordination, resulting in unclear operational boundaries and as a consequence to a "institutional and responsibility vacuum".
Land management Legal and Policy framework	Land Law (2003); Decree on state land lease or concession (2009); Instruction as regards the implementation of decree on state owned land approval for lease or concession (2010)	The same is true for the land sector where the main regulatory body (NLMA) has no authority over the different ministries. Another important issue which may impede sound resettlement is the fact that "the law does not oblige land registration for small scale land use (article 45). Being not formally registered as official land users, they might receive lower compensation and lack any legal back up to negotiate about their lost opportunities in land use with the respective project staff" (p. 24).
Environment protection Legal and Policy framework	Environment Protection Law (1999); Decree on the agreement and endorsement of the National Strategy on Environment years 2020 and Action Plan for the years 2006-2010 (2004); Decree on Environmental Impact Assessment (2010)	The main issue outlined by the analysis of these texts is the one of public participation: mechanisms for public participation remain limited, especially in the EIA process.

Source: Author, with data from Suhardiman, de Silva and Carew Reid (2011).

of the cooperation regime (Menniken, 2007). The second external actor potentially at odds with any cooperation improvements in trans-boundary migration management is the Greater Mekong Sub-region (GMS) programme, initiated in 1992 by the ADB. "The GMS Program focuses on economic and infrastructure development, (...) and largely ignore(s) the Mekong River and aquatic biodiversity aspects" (Keskinen et al., 2008: 85). Part of its portfolio of activities is the GMS Energy Roadmap, which explicitly aims at implementing an integrated approach to deliver sustainable energy, in particular through hydropower development (ADB 2013). If the MRC and the GMS continue to compete rather than to cooperate (Keskinen, 2008), this may directly go against any policy improvement on the part of the four member States.

A need to transfer the resolution of dam-induced migration issues to other regional bodies

To avoid a potential political dead-end, a realistic option may be to transfer the resolution of dam-induced migration issues to other regional bodies, such as the ASEAN and the ADB's GMS. The ASEAN, firstly, represents the right political level of discussion. Regional migration policies are already being discussed at this level, especially regarding the implementation of a common visa for ASEAN citizens similarly to the Schengen visa in Europe. Moreover, some observers have advocated for the incorporation of security-oriented regional water issues to the higher political level of ASEAN: "A shifting of the politicized and securitized part of the Mekong issue to genuine

political bodies such as ASEAN, or to economically powerful institutions such as the ADB and GMS, in order to combine water-related with other issues could help to outweigh China's 'Rambo' position in the water field" (Menniken, 2007: 112). The GMS, on the other hand, might be the adequate body for the funding of such regional migration mechanisms. There is a lot to be done before getting there however, for the MRC has not taken part in the "extraordinary momentum towards regionalism that swirls around it" so far (Hirsch et al 2006: 67).

If dam-induced displacements could be introduced on the ASEAN agenda, what should be the position advocated by the MRC? Should it stick to a mitigation point of view, as mentioned earlier? Or should it rather adopt, along with mitigation, an adaptation vision of migration? Given the unavoidable impacts of dams already constructed or about to be, the latter option seems to be the more appropriate one. It is essential to consider migration as part of the solution to the problem. In the same way as foreign migrants are considered as cheap workforce for the construction of dams, dam-induced migrants may become resourceful agents in the receiving areas, if migration is well-managed. Contrary to Baker's vision on the security implications of migration, migration may well represent an improvement of human security rather than a threat to it.

4. CONCLUSION AND POLICY RECOMMENDATIONS

Dam building on the Mekong brings both direct migratory consequences, by resettling important numbers of people located in the areas flooded by the reservoir of each dam, and indirect migration flows due to the cumulative effects of tributary and mainstream dams on water-related activities – especially fisheries and agriculture. The former type of impacts is insufficiently addressed at the policy level of each LMB country. In Laos in particular, which aims to become the "battery

of South-East Asia", the existing legal and institutional framework presents significant weaknesses in protection resettled populations. As for indirect consequences, they are trans-boundary by nature, and as such should first be addressed at the regional level. If the MRC is the most evident arena for such an issue, it has been shown that the organization might gain momentum in seeking alliances with the ADB's GMS programme as well as with the ASEAN forum. More precisely, our main recommendations would be:

- Governments should "treat resettlement not as a problem but as an opportunity. One key element in this is to mix land-based and diversified strategies, not just to restore people's incomes but to improve them" (World Bank, 2000).
- More resources ought to be invested in the implementation of sound resettlement policies, especially by international funding agencies such as the World Bank or the ADB.
- The MRC should adopt a radical change of paradigm and include adaptation options along with mitigation strategies of dams' social and environmental effects.
- The migration issue should be included to the MRC mandate. This would enable the extension of data and knowledge on water-related migration through the BDP programme of the MRC.
- Cooperation between the MRC and the other powerful regional bodies should be enhanced: the ASEAN may be an indirect way for the MRC to tackle the issue of dam-induced migration while the ADB and its GMS could provide a non-negligible source of funding of such migratory governance mechanisms.

Only a few authors have already acknowledged the true scale of the dam-induced migration issue in the Mekong region. Baker (2012: 23) is one of them: "impacts [of the Mekong dams] on food security and livelihoods threaten to create a situation where migration [...] leads to even greater pressures on populations and states". This article attempts to swirl around this momentum and, hopefully, to further it. ■

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