

CONCLUSION:

The preceding sections have outlined a number of potential cumulative health impacts that may reasonably be expected to develop as the result of a combination of Nam Theun 2 Project interventions, and other external macro and micro-economic development schemes, during the periods 2005-2010 and 2010-2025. As one moves away from the present, and travels further into the future, there is obviously a greater chance that prophecies or predictions do not material. There are simply too many unknown factors. However many of the predicted scenarios, are based upon current and future development plans, as well as on the observation and experiences of how similar large scale infra-structure and general economic development projects, in neighboring countries, have affected health on a local, national, and at times regional basis.

This report has suggested that the most dramatic potential cumulative impacts may arise as a result of external factors, such as urbanization and migration, and not necessarily from some of the sector developments created by the Nam Theun 2 Hydropower Project [e.g. hydrology]. The convergence of a large work force, accompanied by perhaps thousands of camp followers and other migrants, to various localities in the Nam Theun 2 Project intervention will create conditions conducive for a substantial and perhaps explosive increase in vehicular accidents, STI & HIV/AIDS, and certain communicable diseases. The potential increased movement of ethnic minority communities, first as part of the planned resettlement scheme, and subsequently involving other developments on the Nakai Plateau and elsewhere may lead to a rapid breakdown in tradition values. Increased tension and conflict may develop between household members, especially those of different generations. Increased levels of stress will promote the onset of mental health problems. A large exodus of ethnic minority adolescents and young adults to Nakai and nearby district towns, and/or to other urban cen-

ters in the Lao PDR or Thailand, can also exacerbate feelings of disorientation and depression, which may result in alcohol and drug abuse, and other self-destructive behavior. The present health care delivery system is not prepared, or experienced, to handle any of these issues.

The Nam Theun 2 Project, in combination with other economic developments, such as the East-West Corridor, Savannakhet SEZ, and transnational bridges and thoroughfares closely linking the Lao PDR with Thailand and Vietnam, may also dramatically impact on population growth for the entire Central Region. Population growth rates are influenced by many diverse factors. At the most basic level population growth rates reflects the difference between the number of people being born, and those who are dying, in a particular area over a finite period of time [usually 12 months]. Thus if there are more births than deaths, a population will grow. Although low population growth rates are usually associated with a number of positive factors, they do not necessarily imply that the population in question is healthy. Many countries in Sub-Saharan Africa have very low population growth rates, but this is due to the tremendous number of HIV/AIDS deaths and not to high levels of contraceptive prevalence, low crude birth rates, low fertility, and other variables generally associated with a healthy population that has access to high quality basic health care services. A similar situation can develop in the NT2 Project intervention area with an explosive HIV/AIDS and vehicular accident epidemic.

Crude birth rates are also dependent on many variables that include the demographic age composition of the population, as well as several inter-related issues that influence the determinants of fertility for women of reproductive age. This can include median age at first marriage, age at the time of first sexual intercourse, marital status, percentage of eligible women using contraceptives, the desire for more children, and unmet need for contraceptives. Many of these variables can change over-time, but the large scale migration of adolescents and young adults out of rural communities and into urban areas in seek of employment have the potential to considerably speed up this process. Migration may positively interfere with certain variables, while negatively affect others. Many adolescents and young adults may either delay the time of their marriage, or will live away from spouses for extended periods of time. For the latter, this can act as a brake on high fertility rates. Migration may also positively affect fertility for those who are not married. Up until now the age of first sexual intercourse contact [for women] was closely associated with age at first marriage. Delaying the time of marriage could similar decelerate the number of births; especially for adolescents. On the other hand migration to urban areas, where many young women will not live with family members or relatives, can possibly lead to an increased onset of first sexual intercourse contact. It may also lead to higher rates of abortion, maternal mortality, as well as HIV/AIDS and STIs.

Depending upon the extent of the migration, from remote and/or rural areas, into district centers and urban areas, population growth may considerably decline locally [i.e. at the village level], but increase in, or be transferred to, other geographical locations. This process can lead to severely unbalanced, or unhealthy, economic growth as basic social services will be inadequate to serve the needs of a burgeoning urban population. Some of these issues are clearly outside the realm of the Nam Theun 2 Project. The project, itself, will not be able to establish measures to mitigate against such developments, the way it can for an increase in sediment leading to a decrease in water quality as a result of hydrology issues. Interventions need to take place at the national level. However dramatic potential impacts can nevertheless be felt at the household and community level. Who will

replace the “productive members” of a family or community, once a sizable proportion of these individuals migrate elsewhere; or for that matter if they are seriously injured or die from vehicular accidents or HIV/AIDS? Who will provide the emotional and economic social support network for older and younger members of the community?

This report has outlined a series of what it refers to as “*best practice*” strategies. They are intended to be guidelines for future action in anticipation of potential developments that may impact on health. Most are meant to be pro-active in nature, hopefully stimulating discussions and prompt decisions, through a participatory process, and not waiting until serious problems emerge, and in a very short period of time possibly spin entirely out-of-control. Some deal with potential impacts on health expected during the period 2005-2010. This will primarily focus on ways to prepare local authorities, mass organizations, communities, and individuals for issues such as HIV/AIDS, STIs, vehicular accidents, mental health problems, pesticides, and emerging communicable disease problems [e.g. dengue]. The “*best practices*” also suggest ways to improve the technical capacity of the health care delivery system to effectively deal with current and new health issues, but more important they focus on ways to make health care truly more accessible and culturally acceptable. The “*best practice*” strategies also suggest ways to approach a new and vastly different health picture that will have evolved by 2025. One that will be dominated by chronic non-communicable rather than acute communicable diseases.