

# **A COMPLEMENTARY PLANNING PERSPECTIVE FOR BALI: INTEGRATED OF TRADITIONAL PLANNING INTO CONTEMPORARY PLANNING PROCESS**

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## **ABSTRAK**

Makalah ini menegaskan bahwa lembaga tradisional memiliki kemampuan dalam perencanaan serta dapat memberikan sumbangan yang berharga dalam proses penyusunan perencanaan pembangunan daerah. Makalah ini memaparkan kemampuan lembaga tradisional – subak, untuk mendukung pernyataan tersebut diatas. Namun Tentunya penegasan ini perlu waktu untuk membuktikannya di lapangan. Makalah ini mengusulkan suatu proses perencanaan yang saling melengkapi, yang terintegrasi dalam proses perencanaan tahunan dalam penyusunan rencana pembangunan tahunan daerah (*repetada*), yang melibatkan baik dinas maupun instansi pusat, dengan kearifan local dalam perencanaan yang dimiliki oleh lembaga tradisional, seperti subak. Beberapa implikasi yang muncul dari proses perencanaan yang saling melengkapi ini adalah: untuk mewujudkan keberlanjutan pembangunan, desentralisasi kekuasaan, partisipasi, dan perlunya mempertimbangkan kearifan local dalam perencanaan

Kata Kunci: Lembaga Tradisional, Kearifan Lokal, Perencanaan Pembangunan, Keberlanjutan, Partisipasi, Perencanaan yang saling melengkapi.

## **INTRODUCTION**

### **Back Ground**

The Island of Bali is experiencing unsustainable development due to natural resources depletion associated with mass tourism and rapid urbanization. The five year development planed (*Repelitada*) and annual development plan (*Repetada*) key instruments for achieving development goals, fail to adequately acknowledge and use a rich array of traditional, sustainable development knowledge acquired and shared by member of local traditional institutions such as the customary villages (*desa adat, banjar*) the irrigation society (*subak*) and village traditional interest group (*sekehe*). This paper proposes a complementary planning process that links official (*dinas*) and traditional or customary planning activities to better achieve sustainable development at regional level and sustainable tourism development. I illustrate the potential contributions of the proposed complementary planning process by referring to a hypothetical tourism development project

Much has been written about the Balinese way of life (Covarrubias, 1937; Geertz and Geertz, 1975, Jensen and Suryani, 1992). On this small tropical Island, on the eastern doorstep of Java, a distinctive culture has arisen. Three million Balinese has been able to sustain this culture despite being part of Indonesia with its 200 million people. The unique Bali Hindu religion is the centerpiece of the Island's culture providing an elaborate and demanding ritual for guiding daily life (see Figure 1).

The concepts of sustainability is fundamental to the traditional Balinese culture and is reflected in the beliefs and activities of members of local traditional institutions. *Tri Hita Karana* is a concept that promotes harmony and balance between human and God, human and human, and human and environment. Another concept, *desa kala patra*, identifies that importance of harmony among space, time, and the condition,. Viewing themselves as custodians of the land, the Balinese accept as a moral obligation the need to conserve and pass on, undiminished, the natural capital asset. Thus, central ideas associated with Balinese culture are supportive of sustainable development. This view also indicated by BSDP (1992), World Bank (1992),and Tjatera, (1994)

The concept of sustainable development, promoted by the World Commission on Environment and Development – WCED (1987), and endorsed by the Government of Indonesia (GOI), is quite compatible with traditional Balinese the sustainability of culture must receive an emphasis equal to the sustainability of economy and environment. Traditional knowledge regarding environment. Traditional knowledge regarding environmental planning and management is a necessary part of the cultural component of sustainability (Geertz, 1962; Soemarwoto, 1982 ; BSDP, 1992 ; Tjatera, 1994).

However, aspects of economic development – in particular, urbanization and tourism – have placed great strains on Bali natural resources. Examples include the conversion of rice paddy (sawah) to urban related uses, the excavation of coral for land fill at construction sites, the improper disposal of solid and toxic wastes, and the draining of mangroves for specialty tourism facilities and cultivations. In these developments local contributions to decision making have been very limited. Yet traditional support for sustainable living is strongest at the local level. Regional development planning can benefit from these contributions, through complementary regional development planning process.

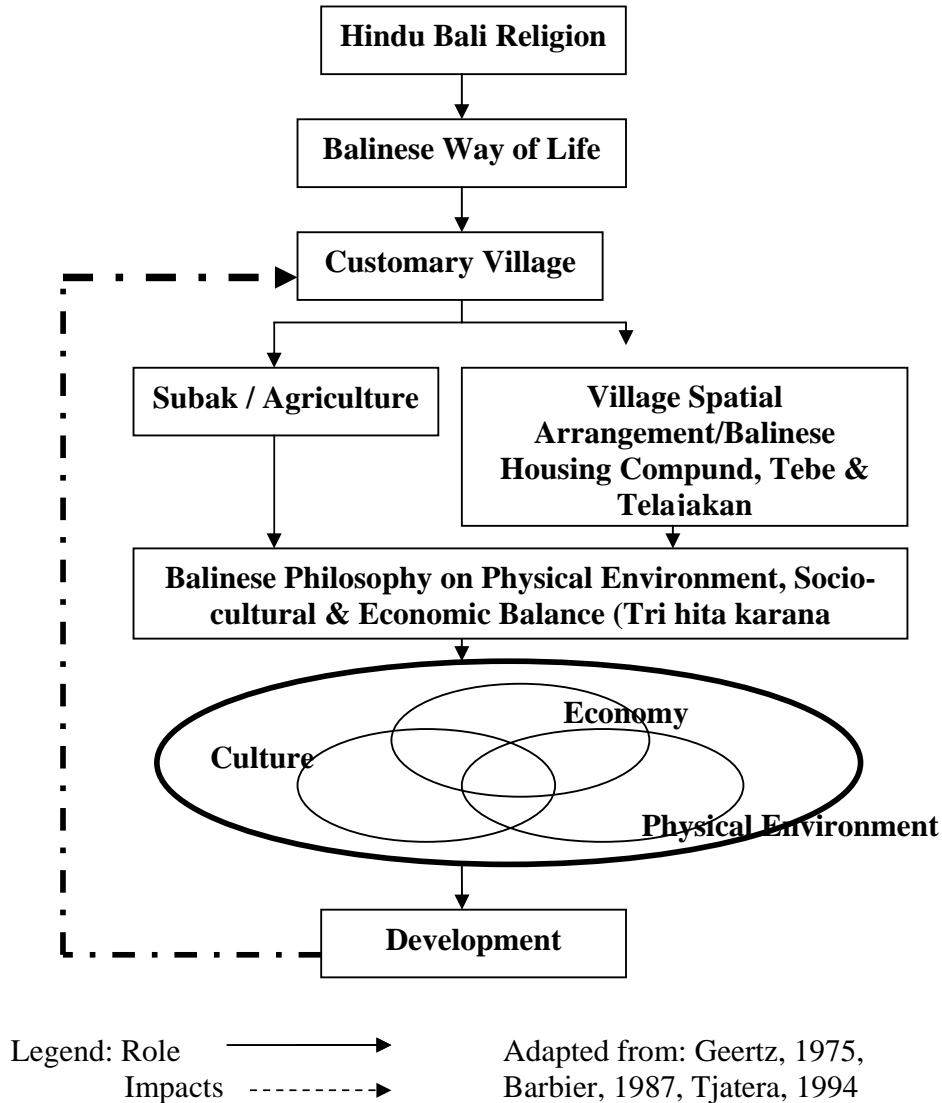


Figure 1. Role of Traditional Balinese Culture in Balinese Way of Life and Development

## Objective

Many actions must be taken by all levels of government before sustainable development can be achieved in Bali. This paper focuses a way to involve local traditional institution in planning for sustainable development at the sub provincial level. Three objectives are identified:

1. Describe and assess official (dinas) and traditional institutions (customary village) as they contribute to planning for sustainable development

2. Develop a notion of sustainable development planning appropriate to the values and customs operating at the village level and
3. propose new institutional arrangements between official and traditional organizations to enhance local collaboration.

### **REGIONAL DEVELOPMENT PLANNING IN BALI: INSTITUTION AND PROCESS**

A controlling, top – down approach of the central government marks the history of development planning in Indonesia since independence. Plans, programs and funding have tended to flow from the top while regional and local agencies of the central and provincial governments have managed and implemented these plans and programs. Since the mid 1970's senior governments have attempted to foster bottom-up planning by encouraging decentralization, participation and skills training at the provincial and district levels. A shift from purely sectoral planning to regional spatial planning has produced problems in interagency coordination. Figure 2 provides an overview of the hierarchy of planning agencies and the relationship among government heads and other agencies.

Five key planning organizations handle coordination: the National Development Planning Board (*Bapenas*), the Regional Development Planning Board (*Bappeda Provinsi*) at the provincial level and *Bappeda Kabupaten* at the district level. *Bappeda Provinsi* and *Bappeda Kabupaten* assist the governor of the Province of Bali and *bupatis* as head of districts, respectively, in coordinating programs of various agencies and preparing five-year development plans that are implemented through annual budgets. At the sub – district or *Kecamatan* and village levels the programs of various agencies are coordinated by the Coordinating Unit for Development activities (*UDKP*) and Village Development Planning Council (*LKMD*). *Bappeda* provides assistance to governor and district head in preparation of the regional development policy guideline (*Pola Dasar*), the Five Year Development Plan, the Annual Plan, and the provincial development budget. *Bappeda* also provides coordination in development planning among local government agencies.

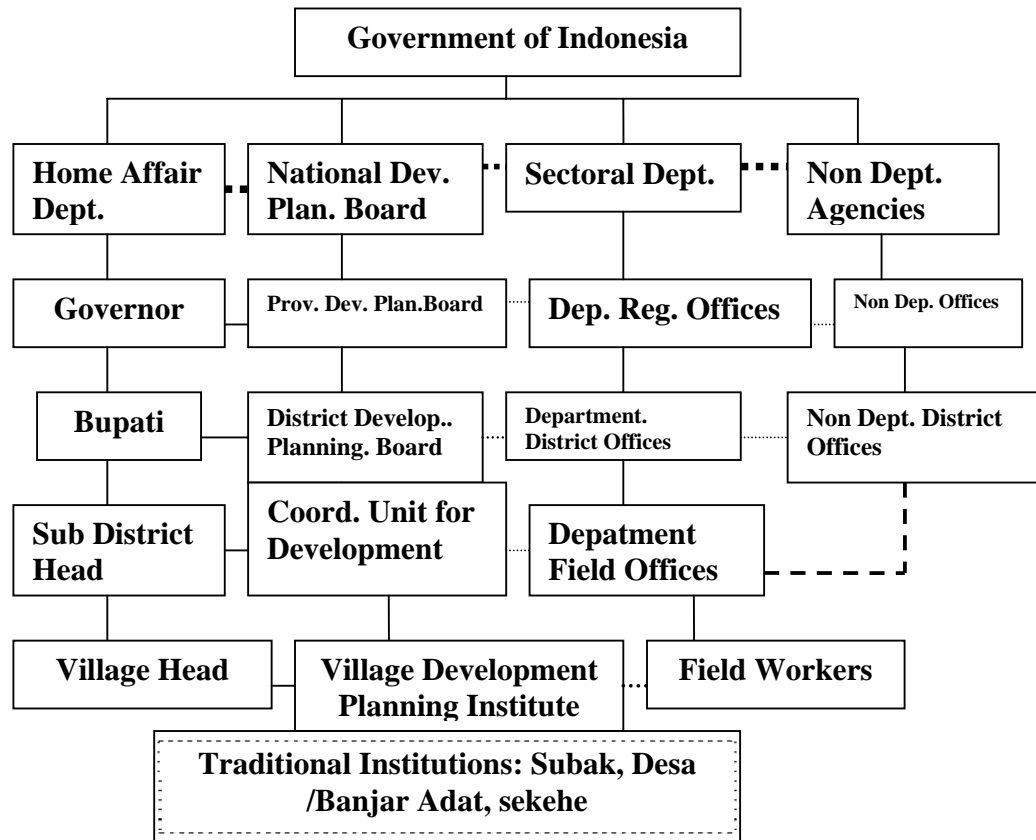


Figure 2 Government of Indonesia: Structural and Sectoral Authorities, and Coordination in Planning Process

Currently, regional development planning practice faces several important limitation at the local level. Planning has a dominant top – down approach with a heavy focus a sectoral planning. The introduction of multi – level development coordination meeting as a way of integrating sectoral activities has had limited success in contributing to more comprehensive planning (see figure 3).

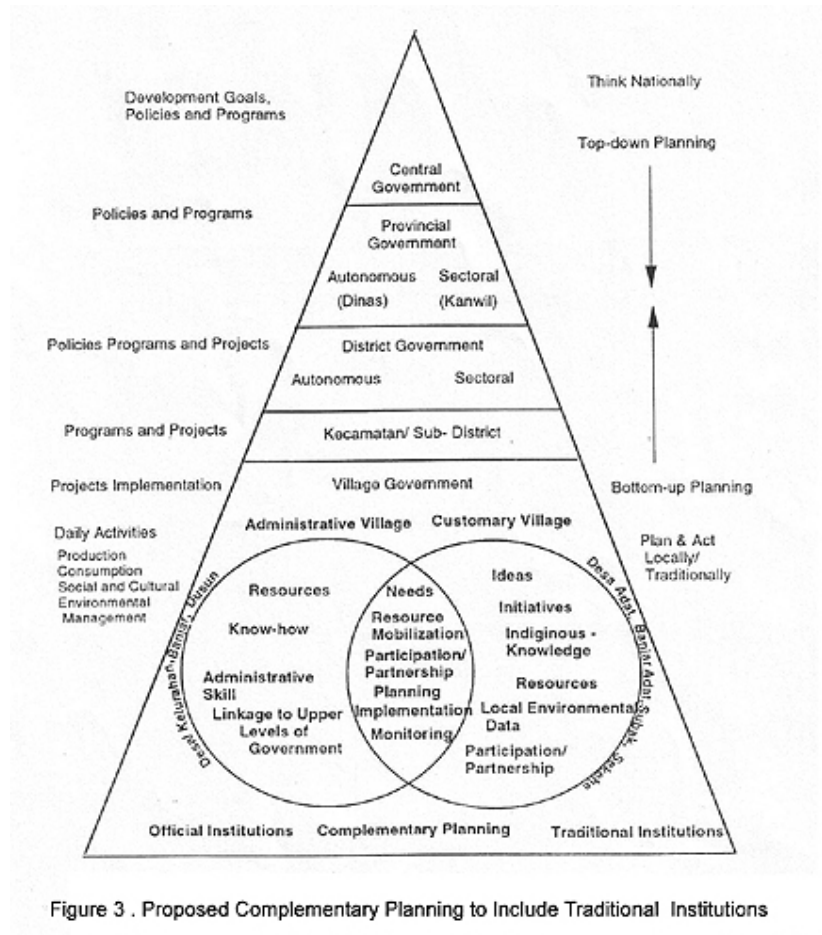


Figure 3 . Proposed Complementary Planning to Include Traditional Institutions

The inability of the Regional Enhancement Board (*BPMD*) formerly called Directorate of Village Development (Bangdes) and his counterparts in the sub – district level to activate community members precludes broader local participation and contributes to program failures. Although the bottom-up planning process stimulates a flow of project proposals from local level officials, planners lack the skill to integrate these proposals from below into a comprehensive framework that clearly identifies spatial and sectoral priorities. Coordination’s meetings tend to produce “shopping list” of requests. Planners at the district level - the first zone of confrontation between bottom-up and top-down planning need skill training for this task. Too many organizations are planning and attempting to implementing development projects at the local level. Financial constraints at the provincial and sub-province levels create a strong dependence on the central government and exacerbate conflict between national and local objectives.

## LOCAL TRADITIONAL INSTITUTION

Bali's economy at present, as in the past, depends heavily on agriculture. In early 1990's, sixty percent of the population earned a living in this sector and live in rural areas. Local traditional institutions have played a major role in maintaining social and economic stability in rural Bali. Four groups of traditional institution are the *desa adat* and *banjar* (customary village and sub – village), the *subak* (irrigations society) and the *sekehe* voluntary group (see figure 4).

The *desa adat* and *banjar* are local administrative unit that parallel the *desa dinas* or official administrative village created by central government. Members of the *desa adat* are responsible for regulating religious ceremonies, certain lands uses, and interpersonal relations pertaining to harmony within village. The *desa adat* may or may not be coterminous with the *desa dinas*. Some *desa adat* have a centralized form of organization while others have a decentralized system of *banjar* or sub villages. The leaders of *desa adat* may be determined either through election or appointment. Appointment may be based on taking one's turn or on heredity. Membership in *desa adat* is based either on ownership of land or family residency.

As the basic unit of social organization, the *banjar* plays a key role in the survival of the culture. It functions as a unit of communal activity and mutual aid for traditional and ceremonial obligations. It supervises community participation in tasks related to weddings, cremations, and other rites, infrastructure maintenance and the collection of money and materials. Community obligations are enforced through forms of censure ranging from fines to shunning.

Both the *desa adat* and the *banjar* serve as the stage on which implementation of national development policies is played out. For example, members of this traditional institution are expected to actively support programs for family planning, health, education, environment and co-operatives. Cooperation's and participation by local residents effect the strong sense of collective responsibility inherent in traditional Balinese society. Yet the success of new initiatives such as family planning indicates the flexibility and adaptability of these traditional organizations for absorbing change while preserving the traditional way of life as the core elements of Balinese cultures.

A *subak* is a local cooperation society of rice farmers living in a sub watershed. This organization does not exist elsewhere in Indonesia. Land owners and tenants, who

share the common water resource, are members. The subak was established as an organization for constructing and operating tunnels, weirs, canals and water diversions to bring water to each rice paddy in Bali rugged, volcanic terrain. Regulations placed on *lontar* palm leaves from the seventh century AD provide the first written record of *the subak*. The *subak* is responsible for constructing and maintenance of irrigations works, allocation of water, control and eradication of pests, establishing the dates for planting, harvesting, dispute, and resolution and organizing the religious ceremonies pertaining to crop success.

As with other traditional organization, *subak* participates in implementing programs promoted by the senior government. The *subak* has been acknowledged in Indonesia for its ability to working in a complementary fashion with official government organizations. The collection of land takes and the resolution of disputes between *subaks* within rice's basins are cases in point. This cooperation between traditional and official organizations carrying out separate planning activities holds great potential for prototypical complementary planning.

The sekehe is a village traditional interest group or club that focuses on one of four concern; religious obligations, economics production including land preparation, harvesting and pest control, artistic, performances, and organizations of youths for sports, environmental remediation, fund raising and other activities.

Local traditional organizations, while making important contribution to Balinese society, have significant limitation due to external forces and internal dynamics. These institutions cannot control externally generated pressure for land development. Loss of agricultural land and environmental degradation result. Some locally based development, such as infrastructure construction, requires senior government assistance. This may contribute to a loss of self reliance and autonomy

Limitation of local nature include lack of information, skilled staff, and appropriate technology. Some customs pertaining to hereditary appointments, accountability of local leader to members and restricted access to women, weaken the potential of traditional organization.



## **THE *SUBAK* AS AN ENVIRONMENTALLY RESPONSIBLE TRADITIONAL INSTITUTION**

Because we will use the *subak* as an example in our discussion of a complementary planning process it is useful, first, to examine this institution's sustainability characteristics. The Balinese irrigation system and water distribution plan operate on continuity and equity principles, respect for the natural environment, and democratic decision making. The concept of *Tri Hita Karana* is fundamental to the activities of the organization's members. Members perform rites and ceremonies in *subak* temples on a regularly basis to celebrate their relationship to their God, to the environment and to each other.

Rice field or *sawah* as the environment is the sacred home for the rice Gods. A farmer must treat the land properly so it will be available to the next generation. Temples range from a small structure located at the upstream end of a *subak*, a larger structure on the boundary of several sub watersheds sharing the same watershed to four "mother" temples on the four lakes forming the headwaters. This system of temples acknowledges though environment as the source of present and future property and the central role of *subak* in cultural preservation.

A strong sense of collective purpose has developed out of these relationship. Decisions within the *subak* are taken collectively and are guided by what is best for land and will ensure food and other basic need for the community. *Gotong royong*, a principle of unqualified mutual aid guides members. Revenues are generated from the membership. Members of a *subak* determine the amount to be contributed during discussion at *subak* meetings. This is a vital aspect of local,. democratic participation.

Modern science and technology have presented the *subak* with major challenges in determining what is desirable and acceptable. On the one hand traditional irrigation technology has been cost effective and environmentally benign. However, as urban development has expanded it has been necessary to shift to modern construction materials to reduce the pressure on local resources. One example is the shift to concrete building to preserve coconut and bamboo tress. However, some modern ideas, applied to a traditional institutions, such as *subak*, in the use of high yield rice seed, have led to quite unacceptable consequences such as serious pest control consequences. *Subaks* have played an important part implementing integrated pest management programs.

Like other Balinese traditional institutions, *subak* experiences limitations due to external forces, knowledge, custom and institutional breakdown. The *subak* has not been able to control urban and tourism based land development. Urban solid waste (in particular, the non-biodegradable component) can clog irrigation canals. *Subak* members often lack of information's on urban and tourism development activities. Thus, they are hindered in providing timely advice to government. Traditional technology is not always adequate or appropriate for addressing newly emerging problems. Technical aid to the *subak* from the universities and senior government agencies may help to alleviate these problems. Some customs, such as gender bias, are out-of-step with current international development philosophy. Decreased water flows, usually due to increased consumption in the urban and tourist sectors, may cause disputes between institutions within the watershed. Traditional rules to resolve these disputes are inadequate so it has been necessary for the government to assign the *sedahan*, a local tax collection agency to mediate.

### **DESIGN FOR A COMPLEMENTARY PLANNING PROCESS**

Complementary planning in Bali is viewed as deliberative, interactive process involving traditional and official institutions. Figure 3 provides a conceptual view of the interacting institutions by level and sector. Regional spatial planning is represented by the *Dinas*, the technical arm of local government. Traditional and sectoral interests are integrated through *Bappeda*. Traditional involvement is greatest at the village level and diminishes as interaction shifts to the sub-district and upper levels.

Here, we present an example of the application of complementary planning involving official and traditional institutions in the annual planning process. Members of *subak* and the government-appointed *sedahan* (who coordinates and supervises *subaks* in the river basin) represents traditional institutions. *LKMD*, *UDKP* and *Dinas Pekerjaan Umum* (Local Government Public Works Office) staff represent official institutions. The purpose of the project is to select an appropriate technology to develop or improve the water distribution system. In this complementary approach we expect that government officials will be able to gain information on needs of *subak* and the *subak* will be able to appreciate its needs within a larger context. In the past, the duties of the *sedahan* have

related to tax collection and problem solving between adjacent *subak*. I suggest that the *sedahan* assume a role of mediator between the *subak* and the local official institution in the planning process.

We provide steps in the proposed complementary planning process (see Figure 4) and describe them below :

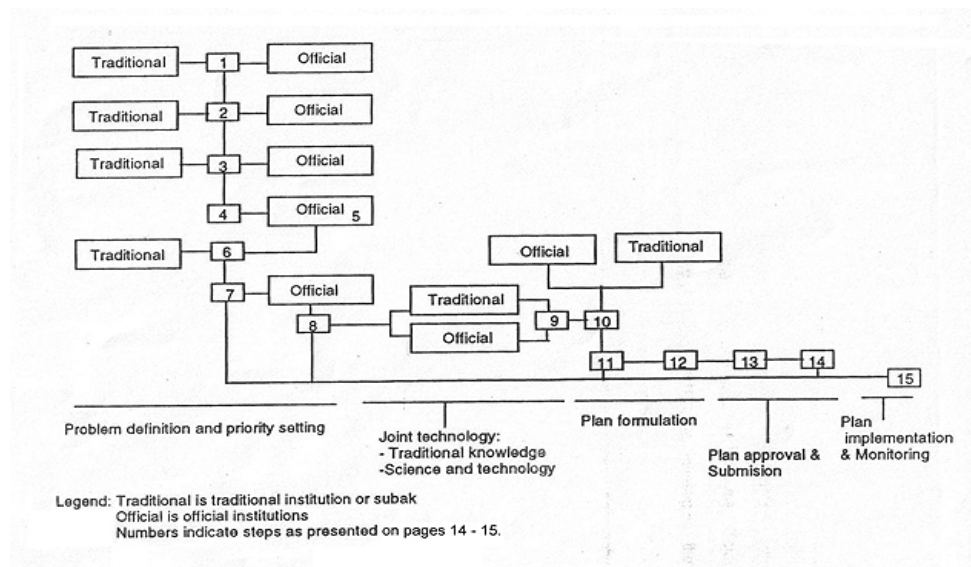


Figure 4 . Flow Chart on proposed Irrigation Project: Illustrating the Cooperation of Traditional and Official Institutions

1. Contact between the *sedahan* and the *subak* occurs during the regular *subak* meeting. The heads of *subak* inform the *sedahan* of an irrigation problem.
2. The *sedahan* contacts Local Government Public Works Office and *UDKP* while the head of *subak* contacts the *LKMD* indicating the needs for, or problems of *subak* irrigation project.
3. The *sedahan* , *UDKP*, Local Government Public Works, *LKMD*, and *subak* meet at the *subak* meeting hall to discuss the problem and to arrange for an investigation to involve all the parties. *Subak* traditional knowledge and technology, internal and external resources, physical conditions and the availability and suitability of new technology will all be considered.
4. These organizations design an investigation to collect the necessary information. This will allow confirmation of the problem and the needs identified by the *subak*.
5. Technical expert from Local Government Public Works collect data on the physical parameters of existing and possible new infrastructure.

6. Result of the investigation are discussed with *subak* members, preferably in their meeting hall. This location will allow for a more informal, comfortable setting where members feel free to contribute their ideas. Discussions of appropriate technologies take into account the *subak* member's willingness to participate based on their resources, knowledge of the irrigation system, and impact of possible changes to the existing system.
7. The *subak* member's direct suggestions to Local Government Public Works (*Dinas PU*) and other government agencies for inclusion in plan design. Technical staffs adjust their ideas, accordingly.
8. The *subak* selects a committee member along with the head of *subak* and the *sedahan* to represent all its members in the plan formulation stage. This committee will organize activities including the call for meeting to discuss the project design and implementation.
9. The LKMD, UDKP, and Public Works take the engineer to the site identified in the plan to determine technical feasibility.
10. A meeting of the *subak* is held to ensure that the plan and technology to be employed are understood and accepted by the *subak* members. Members also discuss cost sharing between government, and *subak*.
11. The plan is prepared together with an estimate of cost and its apportionment between the *subak*, and government.
12. The *subak*, and LKMD give joint approval.
13. The plan is submitted to the higher levels of government. The *sedahan*, UDKP, *Dinas PU* (Public Works) monitor the progress of the submitted plan at the three levels of coordinating committee within the province (*Temu Karya, Rakorbang Kabupaten, and Rakorbang Provinsi*).
14. Implementation of the plan is organized by an ad hoc committee consisting of some members of the *subak*, and the official government agencies.
15. Monitoring of plan implementation is carried out either by the *subak* members or by the ad hoc committee.

This example of the complementary planning process will enhance top-down and bottom-up elements of regional development planning. Proposals moving through this process can be expected to receive support and acceptance at higher levels of development

coordination meetings because of the joint support traditional and official interest at the local level. Traditional institution bring to this process environmentally sound philosophies, human resources, indigenous knowledge and local data. Official government institution offer administrative skills, financial resources, planning experience and firm linkages with upper levels of government.

There are nine specific feature of this complementary planning process that are an improvement over the earlier process.

1. The *sedahan*--a local government appointed tax collector who has a constructive relationship with the *subak*; is to be the initial contact between the *subak*, and official agencies such as Public Works, the Sub-District Development Activity Coordinating Unit (*UDKP*) and the Village Development Planning Council (*LKMD*)

2. There is deliberate attempt to hold meetings at the *subak* meeting hall, home turf of the *subak* members.

3. The *subak* plays an equal role in determining the information to be collected for defining the problem and setting the objective.

4. Discussion of appropriate plan and technology takes into account the comfort level of *subak* members regarding plan suitability to the environment and technology choices

5. The plan formulation team includes representatives of the *subak* selected by the members.

6. Members of *subak* meet to discuss concerns they might have for the plan, the technology and funding.

7. Joint approval b the *subak*, and the village development planning council (*LKMD*) is required.

8. Official members of the local team monitor programs of the plan that are submit to higher levels.

9. And ad hoc committee, including *subak* representatives, initiate and monitor implementations

The annual planning process and budgeting cycle for the principal Five- Year Development Plan Daerah (Repelitada) provides a way to ensure that the complementary planning process considers the interest of the other local traditional institution (*desa adat*, *banjar* and *sekehe*) as well as the *subak* The village consultations (*Musbang*) occurs from

January to April, the sub–district coordination meeting (*Temu karya*) occurs in May and the district and provincial coordination meetings (*Rakorbang Provinsi and Kabupaten*) occur in May to July and August respectively.

At the village consultation, representatives of various traditional institution will examine the previous year's project and prepare a list of new project. The Regional Enhancement Board (BPMD) which is formerly called Directorate of Village Development (Bangdes) and the Home Affairs Department reveal government policies for the next fiscal year. After discussion, a final draft of the project proposals is prepared. The village development budget and subsidies are discussed. The village head send the list of propose projects to the sub – district head.

### CONCLUDING REMARK

The paper asserts that traditional organizations with proven planning capabilities can contribute much to the official development planning process. The paper has highlighted current capabilities of the traditional intuition the *subak*, to support this view. Of course, proof of this assertion must await actual testing on the ground. I propose a complementary planning process to integrate the official twelve month planning cycle of the *Repelitada*, involving both area wide and sectoral official agencies, with planning expertise in the local traditional institution. Implications of the proposes complementary planning process for sustainability, decentralization of authority, participation and traditional knowledge within planning require further consideration.

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