You may have seen slogans all over Taiwan carrying these advices. They really contribute to the state of mind and the presence of mind of the people on the Island. The people are not, at all, disturbed by Nixon's mischieves.

Between 1970-1971 I was doing some study & research in the States. Among other subjects directly related to my professional area. I audited several courses like (1) Economics, (2) Public Investment-Theony and Technique and (3) Planning of Water Resources system, etc. I have become extremely interested in the planning and decision making. On my return last August, I was greatly surprised by President Chiang's third advice. Ah! This advice has got scientific basis. Only man like him can give us such nicety. Whereas the 1st. & 2nd advices have got philosophical and psychological basis, I am not qualified to elaborate them.

What is Planning?

I believe all of you know what is planning and familiar with planning. My interpretation of planning is that planning an organized task for the purposes of achieving certain objectives by means of numerous systematically arranged actions or procedures. Ever since the Harvard University developed the renowned Harvard Water Program between 1960-1965, the new method of approaching decision making has been adopted and adapted throughout all areas of development, be it in politics, in national defence, in economic development, in engineering scheme, in commercial undertaking or in social movement. Planning contains several basic steps:

Planning and Decision Making

by Y. M. Liu Jan. 1972

Introduction

Mr. Chairman & Gentlemen, thank you for asking me to give a little talk here to-day. I feel very much honored.

Last October, after my return from abroad, my mother school, the National Chiao Tung University, through Prof. Lu Yung-Ping, approached me for delivering a lecture at Hsin-Chu. I promised that I might be able to do it sometime in the Spring. Since then I have been thinking of a subject and a content that may be interesting to the faculty as well as the students there. Up to now I have not quite completed the preparation. However, on the insistence of Mr. C. M. Wong and Mr. S. Y. Lu, I am releasing a portion of my immature contents in the hope of obtaining your valuable comments for improving my work. We Chinese call it "PO TSUN YING YU", that means "throwing a brick out in the hope of bringing back jades. It is a good deal. Isn't it?

Actually, my contemplated ambitious subject is "The theoretical basis of careful planning and capable decision-making". As you all know, on June 1, 1971, President Chiang Ka-Shek put out his three famous advices to the Nation. They are:

1. Be respectful with self-reliance,
2. Don't be panicked by the changes,
3. Careful planning and capable of making decisions.
and decision makers. They are hungry for making progress, especially capital investment. They are hungry for home-cookings and, the last not the least, for Chinese food. This is my observation in my 14 years working with U.N. What a bunch of poor experts!

Why Planning

As I have mentioned already that planning is to achieve certain objectives. Not only that. Planning is to furnish successive group actions so that no duplication or confusion may be created. Planning will minimize the use of resources and maximize the effect of the results. It is also for the purpose of time saving.

A catastrophe may be avoidable if there are real good plans. Every body knows a confusion will only cause delay of action and a duplication will only cost money serving no useful purpose. A war may be lost just because of no planning but impulsive actions. The recent battle between India and Pakistan demonstrated very well the careful plan drawn by India to achieve her objectives while Pakistan was bereaved by practically no plan but Yahva Khan's impulsive decision. On the other hand the withdraw of R.O.C. from U.N. shows President's Chiang's SMND, which has not only opened up a new road for R.O.C. but also boosted her prestige.

Who and How?

I must turn now to who should be involved in the planning and how planning should be carried out. Theor-

1. Statement of objective or objectives as explicit and specific as possible.
2. Estimating resource possibilities for achieving objective or objectives as sure as possible.
3. Propose actions and alternatives as exhaustive as possible.
4. Formulation of alternative plans to at least several.
5. Identification of impact and analysis of magnitude and importance of impact besides the sheer benefit and cost study.
6. Assessment of impact as objective as possible.

The first four steps are conventional planning, while the last two are additionals helping to reach to decision making.

With the modern technologies available, such as the use of computer, system analysis, optimization technique, probability statistics, etc. It is possible to propose good plans and eventually reach to a wise decision. In the planning, there is one thing fundamentally important. That is the data and information. I think it is not necessary for me to elaborate more on this. With your permission, I like to deviate slightly to the HUNGRY UN EXPERTS as I call them—a light remark.

There are about 10,000 UN experts working in many nations throughout the world. In the eyes of developing nations, most of them are ugly. They are ugly because of their hunger. They are hungry for date and information. They are hungry for friendship from the nationals. They are hungry for the attentions from the higher authorities
None of them is easy to apply. Too often a decision is reached by politicians, which is usually dangerous.

If sufficient planning is done, a decision may come out automatically. This is only in theory. In practice, there is no perfect plan. Because there are so much information not available or unobtainable. There is only limited degree of reliability of the information or assumptions. Not only information and assumptions are subject to change, the objectives may change from time to time. Inspite of continuous planning, when it comes to decision making, the public interest may not be there. Because legislators are not necessarily represent so called public interest. There may be so many conflicts of interest, which make it very hard for policy makers to come to a decision. In such instance, science alone usually does not work. Art usually takes over. Only great man and genius are gifted with such big but good decisions. Because of uncertainties involved, it takes risks to make a decision. To demonstrate, the following game of two suspects will show:-

<table>
<thead>
<tr>
<th>Years of Imprisonment</th>
<th>Suspect A</th>
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<tbody>
<tr>
<td></td>
<td>Confess</td>
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<tr>
<td>Suspect</td>
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<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>Confess</td>
<td>15 Years</td>
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<tr>
<td>B</td>
<td>15 Years</td>
</tr>
<tr>
<td>Does not Confess</td>
<td>0 Year</td>
</tr>
<tr>
<td>B</td>
<td>20 Years</td>
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</tbody>
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The Art of Decision Making

Conventionally or academically, there are four types of policy decision models:-
1. Pure rational model,
2. Sequential model,
3. Increase model,
4. Satisfying model,
If the two suspects are separately detained without mutual communication but given with above options, try to guess how each will decide.

This is so-called game theory, one of the popular theories of reaching to decision. Basically, we are involved in the field level planning. Our duty is to present alternative plans, state all the costs, benefits, impact magnitudes & importances involved, explain them in detail and leave to the decision makers to choose.

To conclude, I like to say that careful planning is important as it will facilitate decision making. It can influence the decision making but not to replace it. Planning can be improved and expedited by seminar discussions. And decision making should be done timely.