

# **Worldviews, concepts, attitudes and awareness with regard to natural resource management in Samoa and other Pacific islands**

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## **Introduction**

This paper focuses on worldviews, concepts and natural resource management in Samoa and other Pacific islands. For the purpose of this paper, the Pacific islands refer to the 22 developing countries that are members of the Secretariat of the Pacific Community, SPC, including countries from Melanesia (five), Micronesia (seven) and Polynesia (10). Excluded are the relatively big and developed countries of Australia and New Zealand as well as the much smaller (approximately 1-10 sq. km in areas) and mainly uninhabited American islands of the Pacific. It is in accordance with the thesis of Weber and particularly Miller and Guthrie (1990) that “ideas have consequences”. As explained by George Grant (in Miller 1990: 9-11), this paper argues that in development, ideas have the most powerful consequences.

When people have the right ideas driving their actions, everything else will come in its time. But when we are plagued by bad ideas, the best-laid plans will come to naught. Grant pointed out the deleterious results of many of the best-intentioned efforts to aid the poor where vast resources, brilliant strategies, and determined programmes have been frustrated at nearly every turn by inadequate, inconsistent, or iniquitous philosophies

The author is himself a native of the Pacific islands – he is from Fiji but since 1976 he has spent most of his time in Samoa but has also had the opportunity to travel to many other islands of the Pacific and beyond. His observations have confirmed that on a personal, group and even national level, natural and other physical resources and technology are, by themselves, not the key to sustainable growth and development.

The main objective of this paper is to argue that our view of natural resources and how we actually manage our resources is influenced by our worldview, and explain how we may change our worldview to that of a more appropriate one. Apart from this, the paper will also:

- Describe the Pacific islands and some of their characteristics including their resources,
- Describe the various worldviews and concepts held by the peoples of the Pacific islands,
- Explain how concepts and worldviews may be changed,
- Describe that the Biblical Theism Worldview has a sustainable concept for natural resource management which is not understood by the majority of Christians and need to be explained at least firstly to Christians who make up the majority in the Pacific islands;
- Promote collaboration between development workers and the Christian churches and organizations in the Pacific islands in the area of natural resources and their management.

## **Worldviews, concepts, attitudes and awareness**

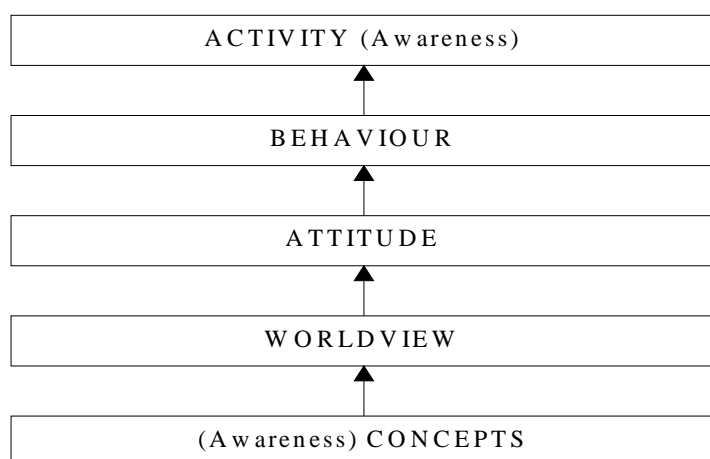
Figure 1 shows a simplified model of how worldviews, concepts, attitudes and awareness influence the sustainability of development activities. A worldview is formed when one becomes aware of and retains various concepts to which he is exposed to via training or experience. The worldview one holds affects his attitude towards various issues which, in turn, affects his behaviour. One’s behavioural mode in conjunction with his awareness of the

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socio-economic situation and the various tools, techniques and equipment available will determine the specific activities carried out – and its sustainability.

Figure 1: A simplified model of how worldviews, concepts, attitudes, and awareness influence the sustainability of development activities: Awareness of various concepts forms one's worldview which influences the person's attitude and behaviour regarding sustainable development; however, the specific activities undertaken will be influenced also by one's awareness of the available options and technology.



The three main worldviews held by Pacific islanders are compared in Table 1 – with regard to (a) who is the ruler of nature including its natural resources; (b) how nature is viewed or “perspectived”; (c) the nature of nature; (d) the nature of man; (e) how resources are viewed; and (f) man’s role in nature.

Table 1: The "nature" of nature according to the three worldviews held by Pacific islanders

	Animism	Theism	Secularism
Ruler	Nature	God	Man
Perspective	Biocentric	Theocentric	Anthropocentric
Nature	Capricious(no system)	Open system (created)	Closed system
Man	A spirit	[Body/mind/spirit]	A mouth, the highest animal
Resources	Limited good	Positive sum	Zero sum
Man's role	Worshipper victim	Steward regent	Consumer miner

Source: Based on Miller & Guthrie (1990)

### Worldviews

As pointed out by Miller and Guthrie (1990), all people and cultures have a particular model of the universe, or worldview. Their worldview does more to shape their development, their prosperity or poverty, than does their physical environment or other circumstances.

As shown in Table 1, Biblical theism, the biblical worldview, holds that because God exists, an objective reality exists that is known and has been established by God. Reality is ultimately personal because it has been established by the ultimate Person. Under Biblical theism, we are seen as living in a positive-sum universe. Resources are limited only by man’s moral imagination, creativity, and stewardship. Theism says that wealth is found

primarily in the minds and hearts of people and only secondarily in matter. The problem of poverty can be solved by creating free societies – societies that allow women and men to create new bounty for themselves and their communities. While some individual resources (e.g., oil) are limited, others (e.g., solar energy) are not. Furthermore, in addition to man’s natural inclination to discover, he has an economic incentive when a resource becomes scarce to develop alternatives (e.g., wind, solar and nuclear power are alternatives to fossil fuels; while fibre optics is an alternative to copper cable).

Table 2. The three worldviews and their concepts of knowledge and other phenomena

Concept of:	Animism	Theism	Secular
Knowledge	Mystery	Truth	Information
The Universe	One-ness	Stewardship	Evolution
History	The circle of life	History is going somewhere	"One damn thing after another"
Economic system	Barter	Capitalism	Consumerism
Purpose of work	To survive	To glorify God	To consume
Ethics	Amoral	Moral absolutes	Immoral

Source: Miller and Guthrie (1990)

The mention of God, particularly the Christian God, in this scientific forum on development is most appropriate for two main reasons. Firstly, for development to be sustainable, the development strategies employed must consider the culture and particularly the religion of the local population; and in the case of the Pacific islands, the local population is mostly Christian. Secondly, science grew out of a Christian worldview – even though many in the general population seem unaware while many “scientists” try to deny this intimate relationship between Christianity and science.

Table 2 shows that secularism sees reality as ultimately physical. By definition, this model denies the existence of a spiritual or transcendent reality. Under secularism, one man’s gain is viewed as another’s loss. Resources are found in the ground, and matter is all that matters. The word “resources” is almost always preceded by the word “limited”. The concept of the earth’s “carrying capacity” is prominent. Children are told that some people are poor because others are rich. The solution is to redistribute scarce resources to the poor.

Animism (Table 1) views reality as essentially spiritual. The physical world is *maya*, illusion. It is animated by spirits. Under the animism worldview, nature is seen as existing for itself and is higher than man in the cosmic pecking order; therefore nature is to be worshipped and feared. Man is to submit to nature. The goal of the average animist is to survive in poverty in the short run and then be absorbed by nature in the long run.

### Worldviews and concepts

Rathus (1994) defined “concept” as “a symbol that stands for a group of objects, events, or ideas that share common properties” while Hanks (1986) defined it simply as “an idea, especially an abstract idea”. Each worldview is composed of a set of concepts in relation to how an individual or a group of individuals view the world and how it works. Table 1 for example can be viewed as presenting six different concepts under the three major worldviews of animism, theism and secularism. The six concepts refer to how each of the three worldview views (a) the “ruler” or dominant factor in life, (b) “perspective” or where attention in life is (supposed to be) focused; (c) “nature” (d) “man” (e) “resources”, and (f) “man’s role” in relation to nature. Furthermore, Table 2 below describes the three

worldviews' concepts of, or how they view, "knowledge", "the universe", "history", the appropriate "economic system", "purpose of work" and the resulting ethical system.

Some concepts are closely tied to the individual's or group's worldview while others may not be closely tied. Changes in concepts, particularly those closely tied to a worldview will ultimately result in a change in worldview. On the other hand, a change in worldview as a result of change in one or a few basic concepts leads to changes in concepts, particularly those closely tied to the worldview.

It is of utmost importance for development workers to realize that individuals and groups may have different concepts of various issues including natural resources and how these resources have to be managed. Without this awareness, stakeholders can be in a meeting discussing an issue without realizing that they are actually talking about different issues. Development workers should realize that their concept of a certain issue may not match that of a community (s)he serves and that the concepts held by various groups in the community (s)he serves are not exactly the same.

It is important to understand the worldviews and concepts held by the different groups in a country. This should enable development workers to understand the different attitudes and behaviours of the different groups and adapt development strategies to fit into the worldview and conceptual landscape of the country. When people have different concepts of a phenomenon, they are actually referring to different things when they discuss this particular phenomenon even though the use of same terms mislead them into thinking that they are discussing the same matter. For this reason, members of multidisciplinary development teams should be aware of the concepts held by themselves and by the other members of the team.

Based on their experiences in the environmental arena in Australia, Reser and Bentrupperbaumer (2001) have mentioned that "what is very clear to [them] is the yawning gulf between social science assumptions and paradigms, on the one hand, and the assumptions and models of the natural and physical sciences ... on the other." As such, when members of a development team talk about "natural resources" or "natural resource management" they should at least be aware of exactly what each member of the team is talking about.

### **Attitudes and awareness**

Our attitude towards natural resources is very important because it will affect our behaviour with regard to natural resources and their management. However, we should realize that our attitude is influenced by the worldview and concepts we hold. There might be better worldviews and concepts out there that we are not even aware of. This paper argues that most Christians are not aware of the Christian biblical worldview and the concepts relating to natural resources and their management. This is where the local churches can play an important role.

### **The situation in the Pacific islands**

The Pacific islands are characterised by little resources and exports, low incomes and serious environmental problems. It is important that the islands broaden their view and consider other worldviews and concepts.

Development in the whole world and the Pacific islands in particular have been influenced by biblical Christian worldviews and concepts. As a result, how Pacific islanders view their gods, nature and their fellow (wo)men and have deeply affected. For example, what we now refer to as “fellow (wo)men” in the current Christian worldview era would be considered “potential dinner” not too long ago. In the process of the Christianisation of the Pacific islands, which still continues, local churches have been used as centres and channels of education, training and development. However these activities have tended to focus on spiritual matters, the three R’s (reading, “riting” and “rithmetic”) and even health.

Table 3A: Total area, population and percent Christians in the Melanesian countries

Country	Area (sq. km)*	Population*	% Christians**
Fiji	18,270	844,330	58.3%
New Caledonia	19,060	204,863	82.8%
Papua New Guinea	462,840	5,049,055	97.3%
Solomon Islands	28,450	480,442	96.2%
Vanuatu	12,200	192,910	91.1%

Sources: \*CIA, 2001; \*\*Johnstone et al., 2001

Table 3B: Total area, population and percent Christians in the Micronesian countries

Country	Area (sq. km)*	Population*	% Christians**
FSM***	702	134,597	93.8%
Guam	549	157,557	95.6%
Kiribati	717	94,149	94.4%
Marshall Islands	181	70,822	95.2%
Nauru	21	12,088	90.5%
CNMI****	477	74,612	90.5%
Palau	458	19,092	96.1%

Sources: \*CIA, 2001; \*\*Johnstone et al., 2001. \*\*\*Federated States of Micronesia; \*\*\*\*Commonwealth of Northern Mariana Islands

Table3C: Total area, population and percent Christians in the Polynesian countries

Country	Area (sq. km)*	Population*	% Christians**
American Samoa	199	67,084	95.7%
Cook Islands	240	20,611	98.0%
French Polynesia	4,167	253,506	85.1%
Niue	260	2,124	94.9%
Pitcairn Islands	47	47	100.0%
Samoa	2,860	179,058	96.9%
Tokelau	10	1,445	99.0%
Tonga	748	104,227	95.2%
Tuvalu	26	10,991	98.0%
Wallis & Futuna	274	15,435	97.8%

Sources: \*CIA, 2001; \*\*Johnstone et al., 2001

In New Zealand, the government and NGO's are also aware of the church as a powerful and effective Pacific island institution and have carried out a number of development initiatives, particularly in health and education, through the church (Momoisea, pers. comm.). This paper argues that the local churches in the Pacific islands can also be used as a channel and centre for ensuring the sustainable management and development of our resources.

One can find in the Pacific all of Miller and Guthrie's (1990) three archetypes of worldviews, namely: biblical theism, secularism and animism (Tables 1 & 2). In the Pacific islands today the dominant worldview is that of biblical theism as can be confirmed by the predominance of christianity in all countries of the Pacific (Tables 3A, 3B & 3C).

Nevertheless, in the Pacific, the concept of a natural resource e.g., land, may vary between countries, ethnic groups, religious groups, age groups, socioeconomic status, educational level, gender and occupation. Other factors that may have a significant effect include one's location within a country, access to the natural resource under consideration, political membership, status in the traditional social structure, closeness to traditional culture and traditions, etc.

In Europe today, the major worldview is secularism which developed from deism (where God was viewed as transcendent but not imminent) which, in turn, developed from theism (where God is viewed as both transcendent and imminent). In the Pacific islands, over a relatively short period of time, i.e., over the last 200 years or so, there has been a change in worldview from animism to deism among the indigenous peoples with a lot of pressure as a result of globalization, education, immigration, etc. for the adoption of a secularism worldview. In all Pacific island countries, a great majority of the population has abandoned its indigenous religions with some or much of its animistic worldview and has adopted Christianity and some or much of its theism worldview.

Table 3 shows that at least on paper each of the 22 Pacific island countries has at least 90% of the population listed as Christians – with the exception of French Polynesia (85.1% Christians), New Caledonia (82.8% Christians) and Fiji (58.3% Christians). However, it would be reasonable to assume that some non Christian concepts are still held even by the Christian segment of the countries' population. According to CIA (2001), a considerable portion of the population are still engaged in their indigenous beliefs, particularly in Melanesia (e.g. Papua New Guinea 33%, Vanuatu 7.6% and Solomon Islands 4%) and to some extent in Micronesia (e.g. Palau 34%).

### **Concepts, attitudes and awareness in the Pacific islands**

Even though Pacific islanders are supposed to have adopted the biblical Christian worldview, they still have clung very strongly to some concepts and beliefs that belong to the animism worldview. This paper argues that this phenomenon is the major reason for the confusion and low level of development and prosperity currently found in many of the Pacific islands.

Many have pointed out that Pacific islanders need to change their attitude if they want to progress or develop. This sentiment has again been recently echoed by Reddy (2002) in a symposium in Fiji where he stated that indigenous Fijians have to change their attitude towards farming, i.e., they have to think commercially, if they want to be successful in sugarcane farming. Such changes in attitudes are difficult for a Fijian still holding the animism worldview or some of its key concepts. For these reasons, it is important that Pacific islanders be made aware of the various worldviews and concepts. This is quite apart

from their need to be aware of the scientific findings and statements with regard to their natural resources, the key issues and options for sustainable management. Kerslake (2001) has pointed out the importance of awareness with regard to environmental issues in Samoa,

### **Effect of environment in the Pacific islands**

It has been argued that Pacific islanders are one-season people who do not come across the need for forward-planning – as compared to four-season people in the cooler regions of the world who need to plan in advance for the winter season . It has been argued that after hundreds or thousands of years of living in a one-season environment has moulded Pacific islanders into relaxed peoples who do not take work seriously in an environment where, during any time of the year, it is relatively easy for nuts, berries and fruits to be collected from trees or shrubs; fleshy edible root tubers to be dug from the ground; fish to be caught from warm waters of streams, rivers and seas; or shellfish to be collected from coastal areas.

This paper argues that after hundreds or thousands of years of exposure to a specific type of environment, the environment is able to affect the people's worldview. And this consequently affects the people's thinking, attitudes and behaviour. However, the paper argues that environment does not have a significant or sustained direct effect on the peoples' attitude and behaviour. For this reason, when one-season people are transferred to a four-season environment, they do not automatically adopt the attitudes and behaviour of four-season peoples. In a similar manner, four-season peoples do not automatically adopt attitudes and behaviours of one-season people when moved to a one-season environment.

### **A strategy for improving attitudes towards and management of natural resources in the Pacific islands**

Firstly, it is important that we determine the various worldviews and concepts held by different groups towards natural resources, the key problems and how to manage or address these key problems. The natural resource management strategies being developed should be adapted to suit the worldview and conceptual landscape of the country concerned.

We also need to determine whether communities we serve have conflicting concepts with regard to natural resources and their management. In such a case, we need to help them develop unified concepts that are not contradictory. Now, when development teams are usually interdisciplinary in nature, it is also important that members of the development team are at least aware of differences in their concepts of the issue being discussed.

It is also important that we also determine the people's attitudes towards natural resources and their management as well as their level of awareness with regard to these matters. Training or workshops developed should be designed in consideration of the people's current attitudes and level of awareness.

Organizations that have been teaching the Christian worldviews should be identified and one or more of them selected to be involved in a 3-group collaborative effort in the Pacific – involving such organizations, local churches and development agencies – in activities such as the running of training courses and workshops to teach the Christian/biblical worldview on natural resources and its development. Irrespective of their worldview, some people use or manage natural resources in an unsustainable manner due to their evil nature. They are lazy, greedy and selfish – personalities that should also be addressed in the design of training courses or workshops.

The vast majority of the population in all Pacific countries are Christian and Christianity already has a sustainable concept of natural resource management which unfortunately is not even realized by most members of the church. There should be a 3-way collaboration between (a) development workers, (b) the local church and (c) a body with expertise in the teaching of the biblical Christian worldview (e.g., Youth With A Mission (YWAM) and others) in the preparation of manuals to promote the biblical Christian worldview with particular emphasis on this worldview's concepts regarding natural resource development and management.

Training workshops need to be conducted to raise the level of awareness of Pacific islanders. Islanders need to be aware of the results of scientific investigations into natural resources and their management. They need to know the various worldviews and the various concepts relating to natural resources and their management – with discussions on their strengths and weaknesses.

Projects should be developed in the form of networks. This will assist in ensuring that members of the network share their knowledge and experience with each other and gain from one another. Also the different networks can encourage and support the growth and development of each other.

There are serious weaknesses in the animism worldview of the pre-Christian era and the secularism worldview of the post-Christian era (Tables 1 & 2) and development workers should collaborate with the church in running seminars as part of extension activities to promote sustainable and appropriate worldviews and concepts in the Pacific islands. As mentioned above a person's worldview may be changed as a result of exposure to a particular type of environment over an extended period of time. However, a relatively sudden change in worldview can be achieved by life experiences gained through other means particularly education and religion.

In Samoa the missionaries were quite effective in shifting the worldviews of the population from animism to biblical theism – partly as a result of effective methods of conversion. Rev. John William's Journal of 1832 as described by Meleisea (1987) provides an explanation of the effectiveness of the methodology employed by the missionaries in getting Samoans to dedicate their lives to their new God and also shift their worldview from Animism to Biblical Theism. In those days (1830's), under animism, sacred creatures (birds, animals and fish) represented ancestral or village "aitu" (gods) and Rev. John Williams would arrange for these sacred creatures to be eaten by those who have decided to become Christians – in front of him (Rev. Williams) in large village gatherings. The author of this paper cannot think of a more effective way of getting people to turn their back on an animistic worldview.

## **Conclusion**

In summary, the key points mentioned by this paper are as follows:

- Samoa and other Pacific islands are vulnerable, poor in resources and have critical environmental problems and should not leave any stone unturned in their search for ways to ensure sustainable development;
- Worldviews and concepts decide people's attitude and behaviour, and development workers should be aware of their own worldviews and concepts as well as those of the other members of their interdisciplinary teams as well as those of the groups they serve;
- In all Pacific islands, the (great) majority of islanders have adopted Christianity which, as a religion, has a worldview and concepts that promote sustainable development in the sense

that it views (wo)man as a steward rather than a worshipper or consumer of natural resources;

- Some Christian groups have published and/or are teaching the Biblical Worldview regarding resource management – as well as other aspects of life. The author argues that the Biblical concept of natural resource management is most sustainable and appropriate but has to be taught and extended as it is practically unknown by the majority of Christian communities in Samoa, other Pacific islands and elsewhere;
- Development workers are to be encouraged to collaborate with Christian organizations in developing manuals that clearly present the Biblical Theism Worldview on natural resources and their management and in the usage of these manuals in extension works;
- It should be noted that there are non-Christians in the Pacific islands and their specific faiths should be considered in designing sustainable development strategies that are suitable for them.

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