

Sustainable Development: Concepts, Factors and Prospects

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It has been said that “living sustainably depends upon accepting a duty to seek harmony with other people and with nature.” According to IUCN-UNEP-WWP (*Caring for the Earth: A Strategy for Sustainable Living*, 1991), the founding principle of a sustainable society is “respect and care for the community of life,” which means “caring for and sharing with other people now and in the future.” It aims to “share fairly the benefits and costs of resource use and environmental conservation among different communities and interest groups, among people who are poor and those who are affluent and between our generation and those who will come after us.”

Zablan (1993) presents a framework of sustainable development stressing the interaction between populations society and the environment (see Figure 1). In Zablan’s paradigm (cited in Torres, “Country Paper on Environment Society and Development,” *Philippine Report on Social Science Perspectives and Sustainable Development*,

1993), key elements which affect sustainability are people (or populations) resources and social institutions. People require the earth's resources for its various needs. However, sociopolitical, economic and cultural institutions which govern the internal and external relationships of various population groups affect the nature, volume and intensity of resource-related demands.

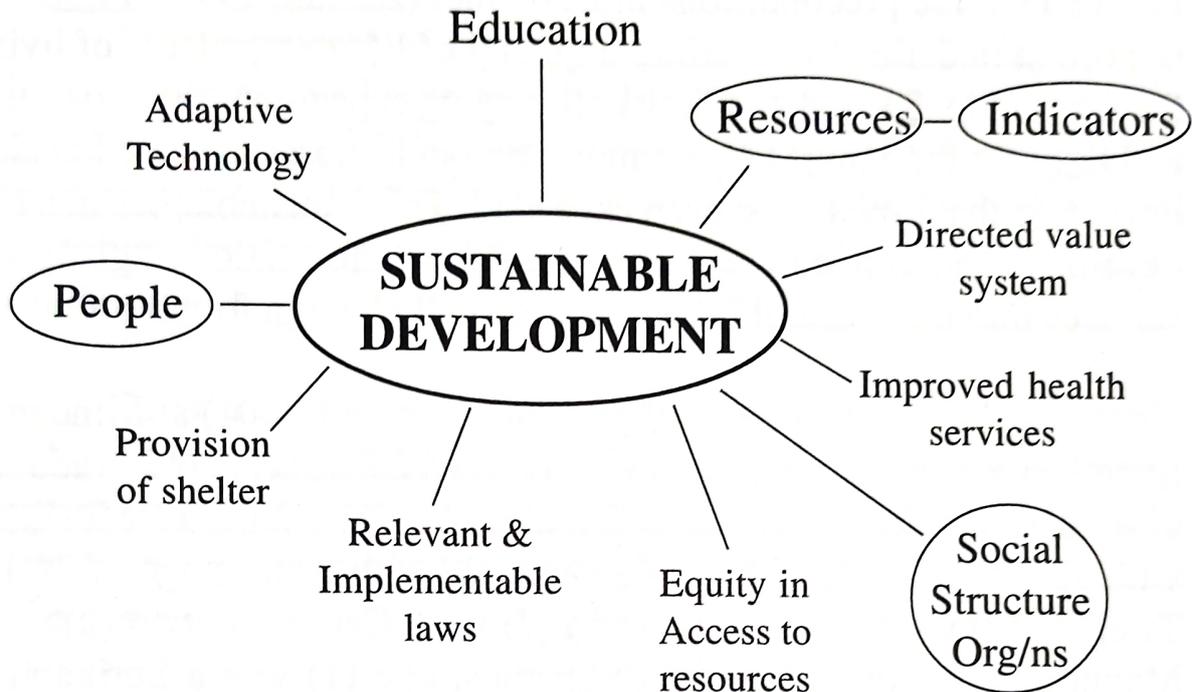


Figure 1. Paradigm of Sustainable Development (Zablan, 1993)

Accordingly, these dynamics may have different impacts. For instance, societal goals (e.g., economic growth) affect the carrying capacity of the environment, changes in population size, composition and lifestyle and influence demand for and consumption of resources. Or unprecedented depletion of specific types of resources caused by natural-or man-created disasters may result in drastic imbalances in the natural, as well as human ecosystems (Torres, 1993).

Among these suggested mechanisms/strategies for improving sustainability (Zablan, 1993) are: (a) the use of adaptive technology; (b) introduction of environment education; (c) development of value

systems relevant to resource conservation; (d) improved health services for population affected by environmental degradation; (e) equity in access to resources; (f) enactment of relevant laws governing relations between individuals, society and the environment, and (g) adequate provision of shelter for changing populations.

To achieve sustainable development within the framework (See Figure 1), three preconditions must be met (Zablan, 1993): First, it is important to define the maximum quality of life or standards of living for the people. Second, the limits of carrying capacity of the ecosystem and resource base must be determined and indicators developed to alert the nation that limits have been exceeded. Third, technologies must be developed and utilized which enhance the transformation of goals and services into more useful but environmentally benign form.

This survey done by Bartolome (October 2001) at Mindanao State University Marawi Campus, involved 25 students (12 graduate, 13 undergraduate; 7 males, 18 females; 12 Christians, 13 Muslims) with ages ranging from 17 to 46 years old with a mean age of 24.12. Twelve (12) were Maranaos, seven (7) were Cebuanos, two (2) were Maguindanaos, two (2) were Butuanons, one (1) was a Surigaonon and one (1) was a Sama-Bisaya. They were asked the following questions:

1. What is your concept of “sustainable development”?
2. What concepts are related to “sustainable development”?
3. What are some indicators of “sustainable development”?
4. What factors contribute to “sustainable development”?
5. How can society contribute to “sustainable development”?
6. What can the government do to achieve “sustainable development”?

Data were gathered through a survey questionnaire supplemented by follow-up interviews. Results were content-analyzed and results are revealed in this article.

1. On the Concept of “Sustainable Development”

Says a 23-year old male graduate student: “Sustainable development is translated in our dialect as *makanunayong kalambo-an*. In my own point of view, *makanunayong kalambo-an* is characterized by economic prosperity, ever increasing standard of living and absolute absence of poverty, crimes and war.”

“It is a process of maintaining the total improvement (well-being) of a person in all aspects of his life, being able to support/sustain needs for progress and development of society. It is a struggle for improvement (survival) even after you have already gained full momentum/development in life. It means everything you think, act or do in this world.”

Says a third year female Biology major: “Sustainable development means to keep up or to prolong the growth of the economy, support or relief for progress to overcome poverty. It means to hold up or maintain a continuous supply of resources for the achievement of the goals of society.”

The continuous and long enduring patterns of changes which involve social, political, economic and cultural changes all affect sustainable development. These are socially relevant and usually sustained for generations.

Says a 27-year old male Maguindanao graduate student: *So kapagudsul o uyag-uyag a pakabaragena a dala ungarin a kabinasan kami inged enggo so madakel a tao, niya nin upaman na manaco: electricity, kalsada, bridges, madrasah uggo so pedpan*. [It is] the development that gives welfare benefits and it has no negative effects such as destruction etc. to the friendly environment and to the populace itself, e.g., electricity, roads, bridges, madrasah etc.

According to a 22-year old MS student (History): *Ang padayon nga kalamboan o “Sustainable Development” mao ang kalambo-an nga makalipay og makahatag kontentong kinabuhi sa*

mga tawo (Sustainable development is development that gives happiness [and contentment] to the people).

“[It is such a] long lasting development that everyone harvest its fruits. It is a way of planning for country’s progress like meeting the needs of the people of this generation without limiting the options of the next generation to fulfill their needs; [It is] a kind of development without destroying others.”

According to a Maranao male businessman, it implies economic prosperity and stable peace and order condition. There is peace of mind. “In Islam, it calls for strong faith in God/Allah. (*Kambago sa Maranao’ pakabagu so paratiyaya ko Allah*) in order to enjoy the path of righteousness in this world.”

In the opinion of a 23-year old Maranao female, “*Aya katangompiya na mitotoro iyan so kalilintad ko darepa a da a balamban o tao ron nago da a baon kalek ko katekewa; nago so ped a manga kalalalongan odi na kadiyahilan* (Sustainable development implies maintenance of peace and order in a place where people can be free to do as they want without fear of robbery, kidnapping or other immoralities or crimes).

“Sustainable” means stable, established and relatively permanent. When one says there is “sustainable development” in a place, he means that there is a relatively stable progress in that place. There is socio economic upliftment/improvement in the quality of life of the people, e.g., “stable” means of sources, the presence of livelihood to support them for a long period of time.

Sustainable development involves a progressive change in the economy (sound economy) of the country which can uplift the impoverished state of the people, that is, focusing on the basic needs to sustain a living, e.g., maintaining support/supply of the basic necessities like food, water, electricity, health services, education, roads, bridges, especially to the poor in the countryside.

Sustainable Development ultimately redounds to human resource development, e.g., development/acquisition of knowledge, technical skills (trained manpower) right kind of attitudes, values, sense of morality, integrity. It also means providing jobs for the poor and unemployed, education to the ignorant or illiterate, power to the powerless, more scholarship to depressed, deprived and underprivileged (DDU) cultural communities, and land for the landless. It requires a stable peace and order condition in the community. "It is purely growth or modernization," claims a Guidance Counselor. "In Maranao, I think it is "*So kapakamo-ayan o thito a kathagompia* (implementation of true development)."

2. Concepts related to “Sustainable Development” (Makanonayong kalambo-an).

CEBUANO	TAGALOG	MARANAO	ENGLISH	MAGUINDANAO
Paglambo		Katatabanga (help from people & relatives)	Modernization	Bargura a uyag- uyag (fruitful development)
Pag-unlad	Pag-unlad	Kapaginuntulan ko oman i galbek	Economic growth	Makagkapyra a uyag-uyag (beneficial development)
Kamaayuhan	Sariling Sikap	(Tareg utang na loob system)	Politics of good governance	Balilidski a uyag- uyag (Blessed Development)
Pagginhawa	Kayod Magbanat ng buto	So katatagompia o ingud ko kalilintad (peaceful development of the community)		
Kalambuan	Magtipid	So kipapaliyogaten ko kalimpiyo (Imposition of cleanliness)		
Kausbanan	Pagginhawa	So kapamula-I ko lopa a da a pamumulan on (Develop uncultivated lands)		
Kaharuray Malungtarong kauswagan or malungtaron nga pag-uswag				

- *Kahusay ug kalinaw* (Peace & Order). Sustainable Development cannot be achieved without peace and order.
- *Pagtinabangay* (mutual cooperation). Development cannot be achieved by one person or group only. Everybody must cooperate.
- *Maayo nga dangatan* (Affirmative/positive consequences/good results).

“Since we cannot call it ‘development’ if the consequences are negative, everybody must direct his effort to achieve positive results,” says a 23-year old male, MA History major.

Says a 19-year old female Surigaonon: “*Paglambu sa pagsulong sa ekonomiya as nasud. Ang padayon sa pagduhag sa mga katawhan na motabang para sa kaayuhan og kalambuan* (Help support the economy for a future development of our country. This will provide more progress and benefit to the people.”

- *Pagsulong sa Ekonomiya* (Support the Economy)

A 24-year old male Law student said: *Kapaginontolan ko oman e galbek stop utang na loob system*. The people and the environment should work with utmost sincerity. Example: Business establishments should pay the taxes due to augment government funds. Government officials should avoid practice of nepotism in their departments and give emphasis to people and government because they are elements of a state.”

- “Nourishment” of the people to improve their lives.
- Economic Growth & Modernization
- Progressive changes, including changes in attitudes, values norms of society.

From a 23-year old female graduate student: “Sustainable Development is related to *paglambo sa usa ka nasud nga dili sayon sa pitik lamang sa gi-ampingan nga unta mauswag ug*

maglambo ang nasud. Sa laing bahin, kining kadugayong paglambo di lamang sa material nga Makita sa gawas kundi nakatatak na sa mga alimpatakan sa mga apailipinhong tawo karon nga gikan sa katigulangan nga nadawat na sa kadaghanan (Sustainable Development in Cebuano is related to progressive changes in one's country, which are for a long term development, covers not only the visible aspects but also changes in the minds/ ideas from elders accepted as norms of society.)"

- Peace and order, livelihood for everyone, eradication of poverty, education for all.

A male MAHistory major: "*Ang konsepto sa padayon nga kalambo-an ay may relasyon sa kahusay ug kalinaw, maayo nga panginabuhian, walay nagkalisud ang pagpuyo og adunay edukasyon ang tanang mga tawo (The concept of sustainable development is related to peace and order, livelihood for everyone, absence of poverty and education for all.)"*

- Paniwala sa Almighty Allah (faith in Allah)

A 25-year old Maranao male Businessman: "*Katagompiya na kinaba matatago ko tamok dakatatego-anon inontabo sii ko katago reka o paratiyaya. (Peace of mind cannot be obtained through money, beauty but through belief/faith in God (Allah)."*

3. Indicators (mga tanda o karina) of Sustainable Development

- Self-discipline, human resource development.
- Community improvements, more livelihood projects.
- "Modern technology. It requires maximizing all available resources of a country. An example is the production of more cavans of rice from each hectare of cultivated land."
- Industrialization – it is a shift from subsistence, a result of industrialization.
Example: more machines are being used as the primary source of power.

- Urbanization – it is the process of evolving a city structure characterized mainly by the tradition from a pre-industrial or agrarian way of life to an industrial one, like Metro Manila.
- Good health & non-polluted environment.

A 27-year old male Maguindanaon: “*Mapiya so kanggugulawasan o mga tao egga dala sakitin; dili makaangay sa kabinasan kami inged mama so: Malsik a ig, malsik a sambel enggd malsik a lupa* (people are in good health. It does not destroy the environment such as water pollution, air pollution and soil erosion).”

A 42-year old Maranao doctoral student lists down some indicators of sustainable development as follows:

- a) Availability of modern technology. Example: Recycling machine to convert garbage into plastic and fertilizer.
 - b) No crimes (*Da a manga simoket*) Example: Imposition of Shariah Law.
 - c) Peaceful living conditions (*Kalilintad o kapagoyagoyag*) Example: Equal distribution of resources not being monopolized by appointing authority.
 - d) Sufficient electricity. Example: Brownouts will cause delay of important transactions/damage electrical appliances, stocked fish/chicken, meat etc.
- Less problem on employment or no problem on mass poverty, which means the country would be heavily industrialized.
 - Stable supply of energy, e.g., oil exploration and drilling are being pursued.
 - Natural and mineral resources are protected and conserved; resources should not be in “open access” to individuals for there is a tendency for misuse and depletion.

- Population control (increase in population or population explosion) would lead to decline in the quality of life and congestion and the effect is environmental degradation.
- People empowerment. People should do something to uplift/improve their living conditions to fight poverty with the help of their leaders.
- Human rights or individuals, rich or poor should exercise their rights, freedom to live freely and look for means to improve their living conditions. They are given respect and equal education.
- Unity. “We (people) are united towards development, that is, our mentality is towards the same goal which is development. Peace and order is likewise maintained.” According to this 23-year old female Maguindanao Social Work major, one indicator of sustainable development is modernized form of living, meaning, “we are not behind in terms of new technology like other countries.”
- Peace and Order (*Kahusay og Kalinao*: Example: No more wars with MNLF, MILF, Abu Sayaf).
- High (Improved) Standard of Living (Example: No more squatters).
- Education for all (No more illiterates and development of skills of everyone). The above-mentioned indicators are best expressed in the vernacular response given by a 22-year old male MA History major as follows:

Mga “indicators” sa padayon nga kalamboan ay mao ang: kahusay og kalinao. Example: wala nay gubat sa MNLF, MILF, og Abu Sayaf og kalinao sa siyudad haruray nga pamuyo Example: wala nay squatters, makakaon 3x a day og makabuhat ug aktibidad nga makalipay o makalinao sa kinabuhi, adunay edukasyon ang tanan. Example: Wala nay illiterate og adunay

“skills” ang tanan nga nahibaw-an (The indicators of sustainable development are (1) peace and order (Example: No more wars) (2) High standard of living (Example: No more squatters) (3) Education (Example: No more illiterates and developing of skills for everyone).

- Higher per capita income of citizens. The average income of all citizens is higher than the usual income before development projects started. This means that the standard of living would be above the poverty line. High literacy level.
- There are adequate job opportunities for job seekers. Consider this response coming from a 19-year old female Psychology major:

“The average income of all citizens is higher than the usual income prior to development. There must be upliftment from below poverty line status to above poverty line. Lesser number of street children, lesser number of jobless people, lesser number of prostitutes, squatters etc.

- Economic growth, social change (e.g., better health and education) opening of new business establishments, beautification and sanitation.

One Sama Bisaya respondent wrote:

1. “Improvement in the quality of life of the residents in a particular town, more job opportunities for residents, opening of new business establishments, beautification and sanitation. If, for example, a group of investors put up a certain business, say, a bookstore or food house, then I can say there is already an improvement because some of the unemployed will have an opportunity to get a job on the newly opened establishment.”
- Advanced Technology as in Japan and the US, new inventions, new discoveries relevant to comfortable living.

- Nationalism. If the citizens of our country would love (patronize) our own products, local industries would be motivated to create quality things that would contribute to our stable economy.
- Freedom from poverty. "If the people living below the poverty line have improved/raised their standard of living, we can infer that development has occurred," claims a 19-year old Butuanon female.
- Unity, good governance, nationalism, preservation of moral values, education for everybody, intact families and honest people.

Note these responses:

By a BS Psychology major:

"For nationalism, we must love our country and support every program for development. Good governance is freedom from corruption and *trapo*, unproductive officials. If we can preserve our own values, we will be able to restore our identity as Filipinos because it is said, a culture of a certain country represents its people. If we can educate everybody as to practice the learned knowledge, we will be able to contribute to the country's stable economy through the taxes that we pay to the government. As it is said, honesty is the best policy.

By a Male Tausog respondent:

"People who are united in sharing ideas within a group to achieve their goals and objectives may yet be another indicator of sustainable development. Example of this grouping is the cooperative."

- Good competent and responsible leadership.
- No more crimes like kidnapping for ransom as a means of livelihood, adequate jobs for the unemployed.
- Peace and order, higher standard of living, economic prosperity, ecological balance, good technology, equal distribution of wealth.

Explains one male college instructor:

“For me, the indicators of sustainable development are the following: a) Peace and order (*kahusay ug kalinaw*) – without this, people cannot concentrate on achieving development; b) ever-increasing standards of living – we cannot call it “development” if people continue to stagnate in poverty; c) economic prosperity – development is roughly equivalent to economic prosperity. Without it, there is no development. d) ecological balance – with pollution and deforestation, the country is at risk for negative consequences/effects. e) good technology; f) equal distribution of wealth.”

- Being able to provide for basic necessities in life at all times.
- Thriftiness, frugality. A person must learn how to manage his finances, e.g., save for the future and old age.
- *Sariling Sikap* (Self-reliance). A person should be self-reliant, e.g., undertake poultry and livestock raising.
- Creativity and entrepreneurship. A person must have a creative mind to create new business not yet in the market, e.g., selling personal services through the Internet.
- Knowing Who God is and what is bad. Strong faith in God.
- Modernization of agriculture, which helps uplift the plight of the poor.
- Government offers more scholarships to poor but deserving students.
- More jobs for the unemployed, more manufacturing companies, or factories.
- High technology infrastructure like roads, bridges, buildings.
- Increase of export products, decrease of import goods from foreign countries, tax turnover to the government is higher.
- Accessible transportation and telecommunications especially in the rural areas.
- Better foreign exchange rate, the dollar rate against peso is low.

4. Factors that Contribute to Sustainable Development

- Modern technologies are factors which generally contribute to sustainable development. Miller (1957) mentioned “power age,” characterized by the widespread use of electricity starting 1953 and continuing to the present.

A male Maguindanao notes the following:

“Mapiya ula-ula; kadtatabanga so mga tao; ergo so kambatiyak sa kapiyan o ‘sustainable development’ siya kaw pidtibalangon sa mga tao (Good attitude helping one another and discussion through forum dialogue with the different sectors and groups of people).

“Be friendly and approachable to people whether known or unknown. Establish rapport so you will easily gain peoples’ trust and support. This way development project implementation will be facilitated. Other contributing factors are 1) Simba ko Allah (Pagsimba sa Allah) 2) Paniniwala. Sa Five (5) Pillars of Islam kung kaya gawin, kung hindi gawan ng paraan.”

- Clean surroundings, good health, proper waste disposal, tree planting, avoidance of graft and corruption.
- Availability of financial resources e.g., funds for the orphanage to sustain their daily needs.
- The family – it is a social institution that is found operating, even serving open functions like being the unit of production, distribution of goods and services and being an agent of social control.
- School – it is traditionally regarded as the society’s main repository of knowledge, ideals and values.
Example: Children develop new conceptions of what kinds of persons they are in school. They adopt new rules for their conduct and acquire loyalties to new ideas and new groups.

- Government – It is entrusted with certain exclusive powers which make it exclusively capable of creating certain conditions needed for progress. Example: It has three economic functions: allocation, distribution and stabilization. It provides basic goods and services. It regulates business activities and provides education and protects domestic entrepreneurs.
- Economic institutions, e.g., banks, corporations and cooperatives.
- Church values, e.g., honesty, integrity, social responsibility, faith in God etc.
- Government initiatives on policy for agricultural development and livestock like cattle raising and poultry, e.g., cultivating undeveloped areas; for those who do not have vast tracks of land, even gardening only in the backyard of their respective residences.
- Government limitations on car purchasing, especially luxury cars, by one family: much better is their financial resources be shared with poor relatives to serve as business capital.
- *Kapamagogopa* (Cooperation) and *kasisinabuta* (Coordination) between the government and the people. We should not rely always on government support. Instead we must support the government by monitoring government properties being destroyed by crazy people, e.g., cutting down of electric posts should be condemned and paying *buwis* (taxes) should be encouraged.
- Good efficient management in the home, school, office and elsewhere; do not tolerate values that hamper development bureaucratic, and traditional values must be preserved. But if someone violates the law, let the case proceed. Do not show favoritism by not jailing a relative. Let justice be served.

Factors that contribute to sustainable development include the political. Also included is the economic rise of business companies and factories that provide people a chance to be employed. The peso-dollar

exchange is a big factor. So long as it keeps on increasing, there will always be a decline in the country's economy. The United States is a progressive continent but because of September 2001 bombing of the Twin Towers in New York, its economy has been badly affected, although this condition does not preclude chances to recover. In the Philippines, an important factor is politics. After former President Joseph E. Estrada's administration, there exists riots and when President Gloria Macapagal-Arroyo took over, there are still Estrada loyalists fighting and disagreeing with the policies of the new administration. This very unstable condition in our country creates fear among foreign investors to invest in our country and therefore affects our economy.

What is really needed in the Philippines today is a lot of understanding, patience, perseverance, active participation and launching of government projects to achieve sustainable development. People should minimize riots and destruction and unite to rebuild the Filipino nation.

- Peace and order is a precondition to sustainable development. It is a concern of everyone. Nobody likes to live in fear, harassment, war or violence, terrorism or any form of hostilities, like kidnapping by the notorious Abu Sayyaf on Basilan. That is why Basileños welcome the Balikatan exercises with open arms. They see this as the only hope for a peaceful secure future.
- Honesty is a basic factor for sustainable development to prosper. A lot of graft and corruption exists in government. If only people are honest and responsible about their transactions and duties, the government will not be a loser. Corruption is not only in terms of money but is also in terms of time and delivery of goods and services to the people.
- Countryside development. If we want our country to improve, we should start from the countryside, e.g., with agriculture projects, production and increase in employment opportunities. Create more jobs by opening more business establishments to employ more

workers/decrease unemployment.

- Civic organizations, NGOs and GOs. We cannot achieve sustainable development unless we are organized.

According to a 23-year old faculty, History Department, factors that contribute to sustainable development are: Peace and Order, High Standard of living, Ecological Balance, Equal Distribution of Wealth.

- Unity or Solidarity. If there is unity, we can achieve our goals easily without wasting time.
- Good, honest, competent leadership. If we have good honest and competent leaders, people will respect and cooperate with them. Thus, this will facilitate sustainable development.
- Establishing cooperatives in every barangay to serve people's needs especially the poorest of the poor.
- Address personal needs, Altruism, respect/conserves the environment.

Here's an interesting response coming from a 23-year old social work major:

First, we address our personal needs, for how can we help others if our personal needs are not met? Second, we help others as in Altruism (expect nothing in return). And third, respect/conserves the environment in which we live because once this is threatened, where will we go?

- Willingness and cooperation on the part of the people in supporting government programs and projects geared towards sustainable development, e.g., avoid water pollution. People should not throw their garbage in open canals and culverts because these would end up in rivers.

- Seriousness of government officials in the implementation of programs, e.g., the problem of degradation of forest lands due to illegal logging. The DENR should seriously implement reforestation efforts.
- Information dissemination, e.g., providing an Information Center to disseminate information regarding importance of clean surroundings, clean air, sanitation, clean production of goods and services, clean technologies.
- Presence of many investors. The more money coming in than money going out, the better the sustainability of our economy.
- Availability of jobs. The more people having stable jobs, the more income for the whole country.
- Exercise caution in electing barangay officials/national leaders (mayors, governors). Choose only those who are pro-people, pro-poor.

A response coming from a male Law student:

“The youth should give concern to their education in order to increase demand for employment; the church should participate in moral boostings of the youth, their values and attitudes; avoid vices like drugs.”

- Industry, cooperation, patience, perseverance, optimism and lot of hardwork.

PROSPECTS

5. What can we do to achieve “Sustainable Development”?

- Good planning. Follow government rules and regulations. Cooperate with the government in utilizing available resources, implementing rules, regulations and laws.

- “As citizens, we must invest to have profit. If we invest, we have to closely monitor our investment. That way it is channeled and controlled and will increase the chance of becoming more productive. As a result, it becomes easy for a society to allow an enterprise to earn profit, thus helping the nation become economically stable.”
- “*Sambiyang sa mga andang a ukit a pakanggay sa kabinasan maraso kalilini sa dala iwagib a mga uyag-uyag, a tawka kausal kuno mga inisapal nganin-ngani miya nin upaman na so mga produkto a panggay sa health and environmental destruction (To change the inherent character that gives destruction to the environment and the good health of the people. Like for example, the use of some products such as illegal soap (smuggled) and other items).*”
- “*Sii ko Muslim na sempaden ka so kataro o Allah 1) Pharatiyaan ka so Allah. Ago so sogo o Nabi. 2) Kontrato ka so piyakibegay reka o Allah (In Muslim belief) we should follow the diet of Almighty Allah and the Messenger Mohammad s.a.w. 3) We accept the fact that we are. 4) Kalek ko Allah (Fear of the Almighty). These all help towards sustainable development.*”
- We should conduct intensive trainings and seminars about economic development to students and concerned citizens for them to realize the value of development.
- In order to achieve sustainable development, we have to develop personal qualities which would help us achieve our goals, such as self-reliance, hardwork, industry, thrift, honesty, tolerance, and determination to succeed.
- Fight against graft and corruption! Cooperate with the government in any of its programs especially those related to agriculture.
- Develop self-reliance.

According to an MS History major:

Para makab-ot gyod and padayon nga kalambo-an o “Sustainable Development” ang unang buhaton mao ang paghatag ug solusyon sa “conflict” sa giyera. Og ang ikadoha mao ang paghatag sa sakto nga edukasyon sa Pilipino aron mawala and pagkaignorante og sayop nga pagtuo (To achieve sustainable development the first thing to do is to settle the conflicts of war and maintain peace and order. The second thing is to educate all Filipinos from becoming ignoramuses).

Everybody must do his part – leaders, followers, rich, poor, workers, management – united in the name of development. Respect each other’s opinion, especially when it is for the welfare of the majority.

Being Filipino citizens, Muslims and Christians must be united. It does not really matter what religion or beliefs we have but we must be aware that Muslims and Christians are Filipinos governed by the Philippine Government under the Philippine Constitution.

- *“Tangkilikin ang sariling atin”* because *“atin ito”* according to a male Tausog.
- Just be the good (best) person you are. We can cooperate and extend our all-out support to help the government achieve development.
- Conserve and protect natural resources for future use.
- Control our population (family planning). A family of 3 is better than a family of 4 (poor?).
- Long term financing, e.g., lending financial assistance to cooperatives owned by the government.

Suggest livelihood projects to the government for possible implementation.

As a citizen we should fully support government programs and projects. Like for instance, help in promoting clean technology and environmental management to improve efficiency and reduce pollution. Use low-leaded gasoline for automobiles.

Be concerned with the rehabilitation of degraded ecosystems. Reforestation along the shores, help in the revival of biologically dead rivers.

“As teachers we can include some topics related to the conservation of our natural resources. Let our students be aware of what is happening with our environment and what will happen to the next generation if we will not help in taking care of it.”

Conduct seminars in the barangays or help in the dissemination of information.

Re-engineering the government. Cultivate a climate to restructure the bureaucracy and privatization.

“Challenge population growth, alleviate poverty economic inequality, poor or lack of law enforcement and lack of political will. Oust corrupt government officials! Or jail them!” Insists a Ph.D. student “We should not tolerate graft and corruption!” she exclaimed.

Instill personal discipline, hardwork in order to reach/achieve goals and objectives for sustainable growth and development. Support programs of the government.

6. What can the government do to achieve sustainable development?

* Implement projects for the people. e.g., water reservoir, plant trees, avoid corruption.

* ensure active participation from people in utilizing available resources.

Says a 17-year old female:

- The government system of sustained cultural enclosure serves as solidifying force. However, the government should make interventions by implementing a number of collective tasks such as education as a compulsory obligation and improved and productive agriculture.
- The government should implement livelihood (*panghanapbuhay*) projects for the less fortunate and educate those who are ignorant or illiterate. Education is where progress begins.
- Government must provide more employment opportunities to eradicate poverty. Poverty hinders/interferes with development.
- “Invite more investors because they are the backbone of the stock market adds, and the stock market is the “foundation of the economy” alleged a 19-year old Psychology major.
- Pay/settle the Philippine’s debt first with the World Bank. This debt has prevented the Philippines from rising up/recovering from poverty and this is classified as a Third World Country.

An MS History major asserts:

Ang una mao ang pagsulbad sa problema sa Abu Sayaf, MILF, MNLF, og CPP-NPA aron ang mga Pilipino makapanginabuhig insakto nga walay sagabal. Ang ikaduha mao ang paghatag ug insaktong edukasyon alang

sa tanang Pilipino og pagdebelop sa ilang mga talento o skills (The first thing to do is to solve the conflicts with Abu Sayaf, MILF, MNLF, CPP-NPA in order that the life of the Filipino will go smoothly. Second, education to develop the talent and skills, potentials of Filipino.

- Launch laudable programs like the DOST programs sustained by the DECS for years.

Comments a 27-year old male Maguindanao graduate student:

Ilayn no gobierno sa mga projects a kaadun siya kan dalpa manalo nga factories atawta paketin muna so nganin nganin a product sa laboratory test ka endo kaingatan so mga epekto siya kami mga tao. Iyama no gobierno siya sa Pilipinas so pakabinasa sa kawi health manalo tobacco company, illegal drug and liquor cos paisagen no mga corrupt government officials a niya nin bo kahanda na "self interest" (The government should see to it that any project established by both public and private corporations should pass through a rigid laboratory test to avoid its negative effects on the health condition of the people and the environment itself. The government should also eradicate companies such as tobacco companies, illegal drugs and liquor companies whose effects destroy the young generation. Likewise, the government should remove from office some corrupt officials whose intention is only for self-interest).

- The government should adopt recent innovations in industrial process designs which aim to reduce waste problems, e.g., develop saleable by-products from residuals or recycled garbage.
- Give economic incentives to encourage pollutive firms to install pollution control facilities.
- The government must not only be concerned with limiting the pollution but should be more concerned about the improvement of health, education and values formation.

- Economic potentials of rural areas must be harnessed to alleviate poverty and uplift the conditions. The poor must be empowered by greater participation in the policy-making process and project implementation.
- Proper implementation of land reform programs and provide infrastructure and other services to increase the productivity of the local people.

Discussion

“Caring for the earth is the battle cry of development activists today,” says Torres (1993). It is an advocacy for strategies that improve the quality of human life within the carrying capacity of the ecosystem. It is an aspiration to meet the needs of present societies without jeopardizing the heritage of future generations. It is a commitment to progress, unfettered by the mindless exploitation of human and natural resources. Caring for the earth encompasses a concern for judicious equitable and responsible development of both natural and human resources. It underlies the global strategy for sustainable development (Torres, 1993).

In a study designed to evaluate and examine the awareness and acceptability of a sustainable agricultural development program among 306 farmers in Lanao Sur, Bashir (1999) discovered that the farmers are not fully aware of sustainable agriculture. There is a meager source of information about sustainable agriculture and unknowingly the farmers are traditionally practicing sustainable agriculture. The traditional farm practices that farmers in Lanao Sur employ are: a) the use of animal and human labor for tilling, cultivation and harvesting, b) *kapamagogopa* or *bayanihan*. c) solar drying and d) rituals asking for blessing from Allah before planting. The farmers suggested farm practices to sustain the farmland such as the use of organic fertilizers, intercropping, multiple cropping, crop rotation, proper irrigation management, post harvest technology, agro forestry, integrated pest management (IPM) and use of renewable energy.

According to the respondents, if the concept of sustainable agriculture were adopted in the province, crime rate, conflicts (*rido*) emanating from land disputes or land grabbing, food deprivation and other environmental problems would eventually be reduced.

Rene Constantino (1984 cited in Garcia 1985) stated the following in one of his speeches:

Development is an unfolding process – a growth of society into its higher, fuller or mature condition. This involves the transformation not only of social structure but also of the individuals that compose society. It however has its own historicity which varies according to different historical epochs and socioeconomic systems. It is not synonymous with westernization and it is the rational use of natural and manpower resources for the satisfaction of the needs of the population not just a sector of society. It, therefore, encompasses restructuring of the economic, political, social, cultural and other institutions that impede the progressive elimination of inequalities, ignorance and injustice in each historical stage of social revolution.

Development is a concomitant process. When a country increases its economic output, the change is not necessarily confined to the economic activities of man. This is because development needs are a set of interrelated requirements that influence one another. When economic growth takes place, society tends to become increasingly structurally differentiated. New roles are formed, thereby creating the need for relearning or resocializing into these roles. Thus, development involves not only economic but also other sociocultural considerations.

Riggs (1970 cited in Garcia, 1985) tackling industrialization stated:

Industrialization is not only being able to manufacture certain products at home but also it requires basic changes in education, organization and social structure. Administrative and political outputs must rise and there is

a greater need for infrastructure, a foundation of roads, schools, health facilities, telecommunication, nets, and electric power.

Development is more than an economic growth. A.P. Thirwall (1974) wrote that development implies more than just a rise in real national income. It must be a sustained, similar rise in real income accompanied by changes in social attitudes and customs which have in past impeded economic advancement.

Development is not mere increase in per capita income but it requires changes in the sociocultural structures of a given society like the transformation from rural living to an urban way of life. George M. Foster (1973) reiterated this contention by clarifying that the satisfaction of life are many and varied and economic rationality though very important, is far from being the only determinant of value judgment. Human society does not only exist for and by economic considerations but it also operates by other realities which are non-economic in nature.