



Building Blocks of Sustainability



DEVELOPMENT DOMAINS AND FACILITIES

Sr. No.	Development domain	Annual Expense (in token)		Annual Income (in token)
		First year	Every year	
1	Primary education	2	0	0
2	Secondary education	3	0	0
3	Higher education	3	1	1
4	Technical education	6	1	2
5	Medical science	6	1	2
6	Roads	3	2	1
7	Ports (sea as well as air ports)	10	4	5
8	Transport	5	2	2
9	5 start hotel	6	3	3
10	Drinking water facility	3	1	1
11	Primary health care facility	3	1	1
12	Chemical fertiliser industry	4	2 (increase to 3 after 3 years)	3 (reduce to 2 after 3 years)
13	Thermal power station	7	2 (annual increase by 1 after 2 years)	3 (reduce to 2 after 3 years)
14	Petroleum refinery	10	2 (annual increase by 1 after 2 years)	3 (reduce to 2 after 3 years)
15	Agriculture & animal husbandry	3	1	2
16	Trade & commerce	2	4	2
17	Jewellery industry	2	2	2

ADDITIONAL FACILITIES (OPEN ONLY AFTER ROUND 3)

Sr. No.	Development domain	Annual Expense (in token)		Annual Income (in token)
		First year	Every year	
18	Organic farming	5	1	2 (increase by 1 after 2 years)
19	Solar power grid	6	2	2 (increase by 1 after 2 years)
20	Modern arms factory	10	2 (annual increase by 1 after 2 years)	5 (reduce by 1 every year, this will also get added to the debt)
21	Naturopathy facility	3	1	2
22	Nuclear power station	10	2	2 (this will be reviewed after two years, this could impact the annual natural dividend of 10 tokens)

For Whom: Ages 15 - 18 years

Time Duration: 2 Hours

Material Required: Tokens / plastic coins, in 2 colours, at least 200 of each colour; 2 sets of purchase cards, and a board to write

Objective: Players are able to understand the various aspects of sustainable development, and apply this understanding in creating a national development plan.

WHAT TO DO (PREPARATION BY THE FACILITATOR)

- This is a team game. Players should be divided into two teams. Try to have similar number of differently-skilled children. For example, both teams should have children who are good at doing math, or those who are good speakers, or are good at leading the team, etc. Both teams should have a pen and notebook to write on.
- Inform them that they are two teams; and both the teams represent a community that is going to build a new nation on a small island.
- Also inform them that different types of players and stakeholders are involved in building a nation and society, such as business people, academic experts, politicians, government employees, farmers, fishermen, engineers, doctors, teachers, forest guards, etc.
- Therefore, each of the two teams should also identify representatives of all these stakeholder groups.
- Give them 10 minutes to discuss & decide which team members represent which stakeholder group/community of citizens. Such representative stakeholder groups can be:

■ Businesswoman	■ Teaching Staff	■ Policy-maker
■ Women's Organization Representative	■ Daily-wage Earners	■ Politician
■ Student	■ Health Worker	■ Farmer
■ Fish-workers	■ Unemployed	■ Industrialist
■ Consultant	■ Forest Guard	■ Engineer
■ Scientist	■ Pharmacist	■ Computer Engineer
■ Space Engineer	■ Statistician	■ Musician
■ Artist	■ Pilots	■ Banker
- Remind them that all stakeholder groups represented in their team will discuss and work together to make important decisions related to the formation of their new island nation.
- Tell the teams to assign these roles within the team so that no member is left out, and that each community/stakeholder group has at least two or more children e.g. 3 children may be farmers, 2 children are traders, 3 are women - representatives, 2 are politicians, and so on.
- Ask both the teams to select a leader for their team. Each team will have only 1 leader. And it is the leader who will facilitate discussions within his/her team and will also negotiate and talk to the facilitator.
- Facilitator should note down the list and number of representative groups within each team and the leader of the teams.

CONCLUDING DISCUSSION

Post game discussion should focus on two concepts—(a) definition and concept of sustainable development, and (b) factors and variables that enable or hinder sustainable development. Some lead questions for this could be:

- What is the meaning of development, what is sustainable development?
- What should be kept in mind while building a sustainable nation?
- Who was the leader in each team? What was her / his occupation? How was the leader decided?
- Did the leaders consult all citizens of their nation? Could they follow this practice every year? If not, why?
- Is there any relation between sustainable development and democracy?
- Which stakeholder group was demanding most convenience? Were these represented by students who are generally more vocal?
- In democracy, which factors can enable all citizens to put forth their thoughts and needs in front of the government?

ADDITIONAL INFORMATION FOR FACILITATOR

- The development domains and 'Purchase Cards' listed in the table are potential areas and facilities associated with the nation building process. Facilitators / educators can also make some changes to this table and cards based on the exposure and knowledge of their school children, the social and industrial context in and around the school and of the city/village where the school is located. For example a school located inside a defence establishment may add 'defence forces' in the list; or a school situated by a river may add a 'multipurpose-dam building project', etc.
- Display the table in a manner that teams are able to see this table during the game. Make multiple copies of the 'Facility picture cards' to be given to teams when they purchase these.
- Now the game can be started. Give each group two minutes to think in each round.
- With every round, the teams, one-by-one, will bring their 'purchase' list. Give them the purchase card of whatever facility they have planned to buy. And in return take appropriate number of tokens (as written in the table).
- Facilitator should not invite both the teams together. Facilitator should also keep in mind that the two teams should not discuss with each other.
- When the first round is over, give 10 tokens each (of the same colour that they started with) to both the teams. Say that nature has given them this dividend. Now start the second round, and the third one. Make an announcement after three rounds.
- Tell them that there has been some scientific advancements this year. Some new facilities have also become available. These are as per the table titled 'Table of Additional Facilities'.
- Resume the game now.
- This game is supposed to last for 10 rounds, but if a annual expenditure for one round, without buying new facilities, for any team exceeds 10, then that nation will be declared bankrupt. And the game will cease.
- If not, the game would continue for 10 rounds.
- In the end, the nation that has more facilities, more returns, and good natural dividend will be the winner.

RULES OF THE GAME

- Both teams have the task of building a new island nation.
- For this work, both the nations will create a development plan; in doing so, the teams will discuss internally with the stakeholder groups and the leader will facilitate this process.
- This process of nation-building will be held for 10 years. One round of the game represents 1 year, thus the game has 10 rounds of play.
- To begin with, both the nations will receive 100 tokens as their primary asset.
- Every year, there will be 'nature's dividend' for both the teams. This will be in the form of 10 new tokens. Therefore from second round onwards, the facilitator will give 10 new tokens to each team.
- In each round, the focus of the teams should be to create their annual development plan. For the same the teams can decide what new resources and / or facility will they build this year. This would be based on (a) their internal team discussion, (b) the list and cost of facilities and (c) the fact that they are an island nation.
- The teams have to, step-by-step, think which facility would they plan to build in the first year and how would they like to progress every year. Teams must be reminded that in making these decisions, the team leaders must consult all stakeholder groups represented in the teams.
- In each round, teams will be given 2 minutes to discuss and make their decisions on new plans and purchase. After two minutes, the group leaders will come forward and will give their list to the facilitator and they will also give equivalent number of tokens for the expenses required to build the planned facilities.
- After each round, the facilitator will write the expense and income for each of the two teams on the board.
- Keep reminding the teams that their leader must take care of all the citizens of his/her nation, and that they should discuss with all, the decision of nation and resource-building every year (each round).
- Facilitator, in between, should also remind the players that their goal is to build a nation in 10 years, which is independent, has good natural and economic resources and is on the path of a sustainable nation-building. Keep giving them ideas that they may choose their national to be a tourism-based economy or an eco-tourism based one, or one that is largely an agrarian nation or a technology-driven business country, etc. Whatever decision the team takes, they must keep in mind that their nation is an island nation and that it should grow sustainably.
- Remind that both the teams will continue to get 10 tokens every year.
- When all the children have understood this much information, then the facilitator puts the table given below in front of everyone. Or write it on the board. Give everyone 3-5 minutes to read the table and take note of it.