## SUSTAINABLE ORGANIZATION AND OPERATIONAL IMPACT

Basanta Behera<sup>1</sup>, Sagarika Panda<sup>2</sup>, Mrs. Shubhangi Patil<sup>3</sup>, Khageswar Jena<sup>4</sup>

## **ABSTRACT**

This article on organizational sustainability is divided in to two parts: PART I discusses the problem of how sustainability approach helps an organization to meet its mission and objectives efficiently and effectively based on the various sustainability criteria. PART II discusses how the operation of an organization affects the three major sustainability areas of environmental, social and economic aspects. This article discusses the concept of sustainability through a case study of a non-profit organization called DKCCDC, based in Santiniketan, West Bengal, India of which the author is the founder and director which has helped him to conceptualize and organize the data and implement the sustainability concepts in greater detail on a first hand basis. The concept detailed here is equally applicable for both profit and nonprofit organizations. PART II discusses the problem of how to calculate Green House Gas Emissions and carbon footprint and how to mitigate the impact of Carbon and Green House Gases as well as consider renewable energy towards carbon reduction strategies and convert footprint in to handprint. Ultimately, the article addresses the problem of how to make an organization sustainable in terms of reaching its goals as well as meeting operational sustainability requirements. This article is based on a study the author conducted as part of his sustainability certification of Harvard University, USA.

**Key words:** Sustainability, Social License to Operate, Carbon Foot print, Green House Gases, Hand Printing

## **PART I**

Organizational sustainability refers to achieving organizational missions and objectives efficiently and effectively with due consideration to stakeholder interests. Following method describes how this can be achieved:

<sup>&</sup>lt;sup>1</sup>Department of Master of Business Administration (MBA), Raajdhani Engineering College, Bhubaneswar, Odisha

<sup>&</sup>lt;sup>2</sup>Department of Master of Business Administration (MBA), NM Institute of Engineering and Technology, Bhubaneswar, Odisha

<sup>&</sup>lt;sup>3</sup>Department of Master of Business Administration (MBA), Capital Engineering College, Bhubaneswar, Odisha

<sup>&</sup>lt;sup>4</sup>Department of Master of Business Administration (MBA), Aryan Institute of Engineering and Technology Bhubaneswar, Odisha

www.ijesonline.com

## 1. INTRODUCTION

The sustainability method is presented here through 16 elements/sections namely: Organization and Internal context, setting objectives, Understanding the external context, Engaging with stakeholders, Social license to operate, Governance and leadership-sustainability policy, Risk Assessment, Financial sustainability, Resources and Operating System, Sustainability Program, Value Chain Model to Scope Measurement, Monitoring and Measurement, Transparency and accountability, Maturity process and Improvement and Innovation are the comprehensive and good way to implement sustainability as these elements cover all possible scenarios and situations and risks to ensure a sustainable organization. However, whole hearted implementation of these elements are essential together with self assessment and PDCA to check at what level of sustainability maturity the organization is and continuously improve to reach the highest level (level 5) of maturity, to achieve full scale sustainability. Through this approach, sustainability can be built in to the process of an organization and not as a separate activity.

## 2. ORGANIZATION AND INTERNAL CONTEXT

Approach to overview of the organization will include the name of the organization, where it is located, its purpose, mission, the services it offers, its assets, employee make up, facilities, core competencies, organization structure and governance, its key stakeholders, its competitive environment and strategic context, operating environment, organizational relationships and sustainability environment.

Overview of the Community will include the demographic nature of the community in terms of location, male/female ratio, literacy rate, climate, economic status/wealth, main industries, income distribution and equality, no. of schools and hospitals, as well as the political, social, economical, technological environmental and legal environment.

Approach to internal context is as follows:

Internal context include mission statement, objectives, leadership styles, and its organizational culture, organization's operating environment, as well as

- Policies for sustainability
- Capabilities resources and knowledge (e.g. capital, people, processes and systems)
- Decision-making processes including sense making and knowledge management
- Systems adapted by the organization centered on the plan-do-check-act model
- Organization's contractual relationships that involve adherence to a supplier code of conduct as a condition of doing business with another organization, determine all the activities, products and services, apply SWIFT (Structured What If Techniques) and SWOT analysis.

Therefore, the factors associated with the internal context should be identified and then SWOT will be used to find the opportunities and threats. Thereafter, risk assessment process is to be used to find the opportunities that need to be embraced and the threats that need to be avoided.

The aforementioned is implemented in DKCCDC as follows:

a. Organizational Operating Environment  1) Product/Service Offerings	DKCCDC is located in a small town of about 0.5 million people called "Bolpur" in the State of West Bengal in India. It has a literacy rate of 60%. Male literacy rate is 60% and female literacy rate is 40%. Male to female ratio is: 50:50. In economics term, about 10% of the population is considered to be rich, 50% Middle class and 40% poor.  DKCCDC offers health care services including free
	consultancies, medicines and diagnosis, Mobile Medical unit, education (coaching school of Grade V to XII) and vocational training for employment, who come to DKCCDC completely free of cost. DKCCDC also does environmental protection and civic works through its customers (i.e. students of the school) for better and greener environment.
2) Vision/Mission/Core Values/Purpose/Core Competencies	The mission of DKCCDC is to improve health care for the poor, help eradicate illiteracy and reduce unemployment in the community. DKCCDC core value is to uplift the condition of the poor and bring them at par with the mainstream of the population in terms of health, education and financial condition and empowerment of the poor to improve the overall sustainability of the community. Its Values are:  • Compassion • Innovation • Empowerment and Equality • Opportunity to all
3) Staff/Volunteer/Member Profile	There are about 50 staff working in DKCCDC. There are no volunteers among the staff. The staff consists of 10 Physicians, 20 teachers, 12 trainers for vocational training and 6 administration staff including accountant.
4) Assets – Facilities, property, equipment, technology	DKCCDC operates in 3 separate buildings one each for health clinic, education and vocational training. It has all the modern equipment for vocational training and computers for education as well as a vehicle for Mobile Medical Unit
5) Regulatory Requirements	DKCCDC operates under the legal requirement of Govt. of India and has the necessary legal license to operate.
<b>b.</b> Organizational Relationships	
1) Organizational Structure/Governance	The organization structure is according to the Memorandum of Association of DKCCDC which includes President, Vice President, Treasurer, Secretary and 5 Members and is according to the legal requirement. The owner is also the President of DKCCDC and completely funds the full operations of DKCCDC.
2) Stakeholders (including customers)	<ol> <li>Main Stakeholders are:</li> <li>Customers i.e. the poor and destitute who come for service to DKCCDC</li> <li>Neighbors in the community where DKCCDC operates</li> <li>Suppliers: Mainly medicines suppliers, computer and book suppliers as well as suppliers of clothes for tailoring school.</li> <li>Government who audits the operations of DKCCDC to ensure they are in line with DKCCDC Mission</li> <li>Employees and staff</li> <li>Towns outside Bolpur</li> </ol>

(Vol. 47, Issue 01) and (Publishing Month: March 07, 2018) An Indexed and Referred Journal with Impact Factor: 2.80 ISSN (Online): 2319-6564

## **www.ijesonline.com**Sustainable Organization and Operational Impact

	<ul><li>7. Other NGOs/Competitors</li><li>8. Volunteers</li></ul>
3) Suppliers and Partners	<ol> <li>Mainly medicines suppliers and book suppliers as well as suppliers of clothes for tailoring school.</li> <li>Medical equipment suppliers</li> <li>Computer suppliers</li> </ol>

(Vol. 47, Issue 01) and (Publishing Month: March 07, 2018) An Indexed and Referred Journal with Impact Factor: 2.80

ISSN (Online): 2319-6564 www.ijesonline.com

Organizational (strategic) Situation for DKCCDC is as follows:

a. Sustainability Environment	
1) Competitive Position	There are many Non-Government organizations in Bolpur. But competitive position of DKCCDC is very good as it offers services with highly qualified staff and very good facilities all at free of cost.
3) Comparative Data	Comparative data is available on competitors' websites.  There is no direct comparative data though as DKCCDC always has the competitive advantage over others as it provides all services completely free of cost to its customers and not dependent on outside funding which no other NGO in the area does.
b. Strategic Context	Strategic context and advantage of DKCCDC is based on providing high quality service free of cost to the underprivileged of the society on a continuing basis.
c. Sustainability Program	Main sustainability program of DKCCDC is continuous improvement of its services through improved quality, new services, improved relationship with its stakeholders to ensure customers (poor patients and students) keep taking the services of DKCCDC as well as ensuring long term availability of finance so that DKCCDC can continue operation for a long time to come.

## 3. ESTABLISHING OBJECTIVES

Overarching and operating objectives of DKCCDC are as follows:

DKCCDC's overarching and operating objectives are stated below:

1. Overarching objective: Reduce illiteracy

## Operating objectives

- Build coaching centers to provide study support to students from Primary to Higher Secondary ( Grade I to XII) to improve their learning abilities as well as grades
- Coach senior students to impart education on basic mathematics and language to small poor children in their community
- Invite poor adults to school to take training on reading and writing skills after their working hours
- 2. Overarching objectives: Reduce Poverty

## Operating objectives

- Provide vocational and skill training to the poor unemployed people to improve their possibility of getting jobs
- Collaborate with other organizations to employ students of DKCCDC upon their successful completion of the training programs
- Help to form Self Help Group (SHG) for women and give them loans to start small businesses
- Help to provide nutrition to the poor by providing meals once a day. Give free books and other stuff for learning.
- 3. Overarching objective: Improve Health care

## **Operating Objectives**

- Build hospital with modern facilities and General and Specialist doctors
- Provide medical services free of cost or minimal charges to the poor including consultancy, medicines and diagnosis
- Advocate the need of health and hyegine and good living to the poor
- Operate mobile medical unit equipped with modern equipment and medicines and visit poor communities to render health care and those who cannot visit DKCCDC facility.
- Provide basic medical training such as, nursing so that number of medical practitioners can increase to provide health care services.
- 4.Improve Community living and environment protection

Plant trees, clean schools and roads etc. for better environmental protection and better living

## 4. EXTERNAL CONTEXT

Approach to External Context is as follows:

External contexts are Conditions, entities, events, and factors surrounding an organization that influence its activities and choices, and determine its opportunities and threats. It may also be called the external operating environment and includes the following

- Use PESTLE analysis
- Identify the external factors
- Each factor has positive and/or negative effects on the organization
- The focus is on the organization
- Use the SWOT analysis on each element
- Identify all the opportunities and threats

The External Context of DKCCDC

### **Political**

DKCCDC is established under the Societies Registration Act of 1861 of Government of India. This Act is a tool for the Government to help establish non-Government and Non-profit organizations with the purpose of channeling aids to these organizations to help in projects related to removing illiteracy, better health care, flood relief etc.

Opportunities: It is easy to establish NGOs and so, the owner of DKCCDC has started his NGO with his own funding with a view to fulfill the purpose of DKCCDC.

Threat: There are many political parties vying for vote in Bolpur. it has become difficult for DKCCDC to remain neutral without supporting any political party. Sometimes, opposite political parties creat problems in program implementation, if they don't receive votes in their favour.

## **Economic**

The town of Bolpur is economically asymetric meaning that though there are many

www.ijesonline.com

rich people, however, majority are poor. Therefore, Govt. aid is not always sufficient to help the cause of the poor.

Opportunities: Due to many underprivileged people in Bolpur and surrounding areas, there are clearly long term opportunities for serving these people according to DKCCDC's goals. Therefore, DKCCDC has made many capital expenditures and built school, hospital and other infra -structure.

Threat: DKCCDC is totally funded by its sole Owner/Founder. Therefore, the main threat is that how long he can continue to fund it. Secondly, even if he has funds, how he can ensure sustainability of DKCCDC after his death. He is now 60 years of age. Further, job opportunities in Bolpur are primarily in the agricultural sector. Therefore, students may find it difficult to find jobs even after being trained and may need to migrate to bigger towns for jobs.

## Social

The citizens of Bolpur welcome the idea of NGOs operating in their communites as it also helps in improving the well being of the poor people in their community and bulds a healthy and prosperous image of the town.

Opportunities: Due to conducive environment in terms of support from the local community, it is easy to run a NGO in Bolpur.

Threats: Many poor and sick people line up for free health care which sometimes spread disease in the community. Further, due to lack of sanitary facilities, they defacate on the roads and make the roads dirty. Therefore, neighbours of DKCCDC often threaten with closing down DKCCDC.

## **Technological**

Bolpur is well equipped with internet facilities and technology enabled learning for imparting education. However, medical facilities are not always modern and sometimes good doctors are not available.

Opportunities: DKCCDC is currently offering many IT courses and can expand into more web-based education. This will enable the underprivileged students access to internet and global exposure to possibilities in education, knowledge and jobs and will truly enable them to change their lives and empower them to be social change agents.

Threats: Offering proper health care to the underprivileged is a major problem due to insufficient healthcare facilities as well as inadequate advanced equipment.

## **Environmental**

There is no environmental regulations that is in force in Bolpur.

Opportunities: There is a lot of opportunities for improving the environment and DKCCDC is involved in a lot of environmental work such as planting trees, cleaning roads, schools etc. These work are done by the students themselves under leadership as part of their learning to serve the society.

Threats: The main threats is of spread of disease due to high level of pollution and filth in the town due to poor environmental care and protection.

## Legal

DKCCDC is legally constituted.

Opportunities: DKCCDC has employed its own security due to uncertain legal environment to protect its infrastructure. DKCCDC is also offering courses on security and private defense to bolster the safety of the citizen and enforcement of laws.

Threat: Due to uncertain legal environment and ineffective law enforcement, DKCCDC sustainability has become rather precarious.

## 5. DKCCDC STAKEHOLDER ENGAGEMENT

How Stakeholders were engaged:

- Staff and employees were asked about what is their understanding of environmental sustainability and how it can be improved. Therefore, teachers, administration staff, doctors and nurses were approached and they responded in writing
- From the patients and students, same questions were asked but their responses were recorded or noted down in paper.
- Staff and customers were told about the NGO sustainability targets
- Review the engagement plan at regular intervals i.e. weekly
- Check the progress against the goals on a fortnightly basis
- Identify specific metrics to measure the progress (such as reducing water usage, reducing electricity consumption, reducing waste generated etc.)
- Use the metrics to determine the effectiveness of the efforts.
- Internal Board: They are involved in strategizing and developing Mission of DKCCDC.
- Management and Employees: They operate DKCCDC and ensure quality and customer satisfaction
- Donor: Directly involved and is the founder, director and financier of DKCCDC
- Customers (Students & Patients): They are the raison d'taire for the organization as DKCCDC exists to serve them
- Suppliers: High level of involvement as they ensure supply of books and branded medicines at discount.
- Community members and neighbors: Their involvement is limited but their support is essential for the continuity of DKCCDC and to get "License to Operate". Therefore, fortnightly I take feedback from my community members about the improvements we are making.

**6.** TABLE – 1 below depicts the stakeholder engagement

7.

**8. TABLE 1** (Stakeholder Engagement)

9.

<u> </u>					
Stakeholder Group	Involveme nt	Influence	nence Contributio Method of Engagement/Freque		Interests
				ncy	
Internal:	They are	High level	Develops	Meet quarterly	High level
Board	involved in	of	objectives of		of
	strategizin	influence	DKCCDC		interests

## International Journal of Engineering Sciences Paradigms and Researches (IJESPR) (Vol. 47, Issue 01) and (Publishing Month: March 07, 2018)

An Indexed and Referred Journal with Impact Factor: 2.80 ISSN (Online): 2319-6564

www.ijesonline.com

Management/ Employees	g and developing Mission of DKCCDC.  They operate DKCCDC and ensure quality and customer satisfaction	as they determine the direction of DKCCDC.  Involved in selection of suppliers and customers. Often affordable customers try to receive services of DKCCDC as it is free of cost and high quality.	and monitors and controls its activities.  Participates in day to day operations of DKCCDC.	Direct contact with the customers and suppliers on Daily basis	as they determine and guide the strategic objectives of DKCCDC and ensure that DKCCDC is sustainabl e on a long term basis.  High level of interest as they ensure DKCCDC operates according to the mission of DKCCDC and monitors and controls the activities of DKCCDC.
Volunteers	No direct	So, proper screening is done to ensure only truly needy avails the services of DKCCDC.	Insignificant	Word of Mouth to	Insignifica
	involveme nt			Customers about DKCCDC	nt
Donor	Directly	He is	He makes	He is directly	Have high
Stakeholder Group	Involveme nt	Influence	Contributio ns	Method of Engagement/Freque ncy	Interests
	involved and is the founder, director and financier of DKCCDC	directly involved in both strategizin g and operations of the	the full financial contribution s for the operations of DKCCDC	involved all the time.	level of interest and drives DKCCDC and its goals.

**IJESPR** www.ijesonline.com

(Vol. 47, Issue 01) and (Publishing Month: March 07, 2018) An Indexed and Referred Journal with Impact Factor: 2.80 ISSN (Online): 2319-6564

www.ijesonline.com

		NGO			
External					
Customers (Students	They are	Have high	Financial	Survey on monthly	Have high
and Patients)	the raison	level of	contribution	basis	level of
·	d'taire for	influence	is nil as they	Feedback after	interest in
	the	as their	don't pay	services provided on	the service
	organizatio	satisfactio	for the	weekly and random	of
	n as	n of	services.	basis	DKCCDC
	DKCCDC	services	Main	Continuously and as	as without
	exists to	provided	contribution	required basis	it poor
	serve them	by	s is their	Quarterly	patients
		DKCCDC	opinion of	parents/teachers	can not
		bring	the nature	meetings are held to	get
		them to	and quality	learn about	medical
		DKCCDC	of services	customer's needs and	treatment
			provided	if services can be	and poor
				improved within	students
				available budget.	may not
					get
					education
					or skills
					for
					employme
					nt
Suppliers	High level		High level	Direct and via	They have
	of		of	telephone and emails	high level
	involveme		contribution	on daily and as	of
	nt as they		s as they	required basis	interests
	ensure		ensure		in success
	supply of		supply of		of
	books and		medicines		DKCCDC
	branded		and books		as
	medicines		and other		DKCCDC
	at		materials are		contribute
	discount.		delivered on		s to their
			time, at high		businesses
			quality and		through
			competitive		purchasin
			price		g from
					them.
Local Profitable	Limited	Limited	Has no	There is no	They have
Businesses (who are	involveme	influence.	contribution	engagement	interests
offering similar	nt	However,	S		in a
services at cost)		they some			negative
		times			way as
		complain			they do
		that due to			not want
		free			DKCCDC
		service			to succeed
		provided			as it

## 4. SOCIAL LICENSE TO OPERATE

Approach to securing the organization's social license to operate

The social license to operate exists when the activities of an organization or a specific project has the ongoing approval within the local community and other

SSN (Online): 2319-650 www.ijesonline.com

stakeholders. In order to achieve the social license to operate, an organization needs to adopt the following approach:

- Understand the community's interest/disinterest in the operation of the organization
- Understand the community's convenience/inconvenience in the operation of the organization in the community
- Understand the legitimacy, credibility and trust components of the Social License to
  operate so that the risks attached to it can be addressed and mitigated considerably, if
  not completely eliminated.
- Allocate sufficient time for relationship building with the community
- Do something of interest to the community even if it is outside the main activities of the organization to get the community buy-in of the organization's activity i.e. to get SLO.
- Be aware of the techniques for capacity building at the local level
- Appreciate that the quality of the social license to operate is dynamic and responsible to changes in perceptions regarding the organization and its activities, decisions and projects. It is also susceptible to outside influences. The organization has to be diligent to work hard to maintain its social license to operate over time.

DKCCDC can ensure social license to operate by keeping the community members and local council/government happy so that they allow DKCCDC to operate. Though DKCCDC is a Govt. registered organization and licensed to operate, its customers create lot of filth, noise and even disease to some extent in the community as it treats very poor/unhygienic people as well as teaches and train poor children who creates lot noise and sometimes lack proper mannerisms. It may be emphasized that the community itself has no particular interest for DKCCDC to operate as it is a well to do community where DKCCDC operates as the Owner's house and facilities are located there

Meeting the community members and local council regularly, getting them engaged and developing good relationships, reducing their perception of risk, reducing conflict, address their concerns, advocating the need of DKCCDC activity to them on the importance of this social good and social work for overall community development are the best ways to maintain social license to operate.

## 5. ORGANIZATIONAL GOVERNANCE AND LEADERSHIP AND SUSTAINABILITY POLICY

Governance supports the organization's ability to meet its objectives in an uncertain world. Governance supports the organization's leadership as it seeks to address the organization's ever changing external context and seeks to continuously improve the internal context so the organization can meet its objectives. The governance provides the mandate and commitment for sustainability and makes sure that the provisions of the sustainability policy become part of what every member does every day. Organizational governance is the system by which an organization makes and implements decisions in pursuit of its overarching objectives. Organizational governance is the most crucial factor in enabling an organization to take responsibility for the consequences of its decisions and activities and to integrate the three responsibilities (environment, social well-being and shared value) throughout the organization and its engagement with the internal and external stakeholders. One of

## International Journal of Engineering Sciences Paradigms and Researches (IJESPR) (Vol. 47, Issue 01) and (Publishing Month: March 07, 2018)

An Indexed and Referred Journal with Impact Factor: 2.80

ISSN (Online): 2319-6564 www.ijesonline.com

the responsibilities of DKCCDC is to communicate with the external stakeholders about the approach the organization is using to manage its risk.

The sustainability policy serves as the foundation for the QEH&S management system and provides direction for the entire organization. The policy lets people in the organization know what's important to management. The policy should not be too specific or lengthy, but it should be meaningful to employees as well as customers, suppliers, contractors, and other stakeholders.

The content of the policy is up to the organization. However, DKCCDC must specifically address the following commitments:

- compliance with all relevant EH&S legal requirements, customer and product requirements, and any sector guidelines maintained by associations, and any other QEH&S commitments made by the organization
- prevention of workplace injuries
- continual improvement
- prevention of pollution
- other sustainability commitments, especially to stakeholder engagement.

## Sustainability Policy of DKCCDC:

- **Vision:** DKCCDC should make sure to build a strong argument for the reasons why DKCCDC is needed. Accordingly the first rule for risk and sustainability is to have a clear vision,
- **Finance**: DKCCDC needs to guarantee a future for DKCCDC, it is crucial to develop a strong financial plan for long term sustainability of DKCCDC
- **Community Support**: DKCCDC needs long term support of the community to run its operations in the community successfully and peacefully.
- Quality of Service: Though DKCCDC offers free service to the underprivileged, they will not come to DKCCDC unless they perceive a benefit to come to DKCCDC. So, DKCCDC need to maintain high quality of service
- Motivation: As DKCCDC is primarily driven and financed by its owner/founder, he needs to ensure that his motivation and willingness to serve the underprivileged of the society is always intact.
- Environmental, social and economic accountability: DKCCDC needs to ensure that these areas are addressed properly for sustainable operation which will also benefit the community at large.

## RISK POLICY AND RISK ASSESSMENT OF DKCCDC

From the perspective of the organization, all activities, products, and services have a sustainability footprint. This footprint creates impacts to the environment, society, and the economy. Each impact creates risks for the organization and its stakeholders. The organization can mitigate these risks through responsible operation that avoids creating impacts to the extent possible. (Pojasek, 2012).

## **Risk Assessment**

FOOTPRINT ====== MPACT ====== RISK

## **Risk Policy of DKCCDC**

The approach to risk assessment **is** about overall process of risk identification, risk analysis, and risk evaluation.

• DKCCDC needs to define the purpose of risk management and how it links to

SN (Online): 2319-656 www.ijesonline.com

DKCCDC vision and mission.

- DKCCDC should identify and assess risks to its operations on a regular basis (i.e. quarterly) for smooth operation.
- DKCCDC should allocate appropriate resources for risk management i.e. insurance
  policies to protect its assets, appropriate staff who will be responsible for developing
  and implementing risk management policies i.e. accountabilities and responsibilities
  for managing risks.
- DKCCDC should reassess its risk management strategies/policies as new risks occur or where risk mitigation strategies are not working
- Establish and maintain rules governing appropriate risk behavior and practices. This
  should include how its patient and students, who are the main customers will behave
  to avoid risk to spreading disease to the community as well as acceptable level of
  noise.
- Be compliant with local regulations for environmental, safety and law enforcement.
- DKCCDC should have a risk monitoring and control procedure with KPIs for measuring risks to ensure risks are properly managed.

## Major Risks of DKCCDC are

- Complaint by community members of increased traffic of patients and students which
  is creating nuisance related to noise and filth and consequently, risking losing the
  license to operate
- DKCCDC customers are not attracted to DKCCDC service and do not attend to/visit DKCCDC services
- What if the owner who funds DKCCDC loose his motivation to serve the society or can not arrange sufficient funds in future or dies

**Table 2** DKCCDC Risk Assessment and Potential Mitigations for Major Risks

Risk Type	Risk Event	Risk Consequences (Opportunities/Th reats)	Risk Controls	Effectivenes s	Likeli hood	Consequenc es	Priorit y for RiskMi tigation	Risk Action
Community /Neighborh	Complain by	Threat.	i) Employ guards by	Customers become	8	Community		DKCCDC needs to
/Neighborh ood	by community members of increased traffic of patients and students	Risk of spread of disease by the patients as well as increased traffic and noise and filth generated by the customers i.e. patients and students Community may not allow continuity of services by	guards by DKCCDC to control noise and filth by controlling the customer behaviour. ii) Talking to customers on the need to behave appropriately including not		8	Community will be more tolerant towards DKCCDC and better see the need for the services provided by DKCCDC.	2	
		DKCCDC ii)DKCCDC will not be able to fulfill its mission iii) Poor customers will loose the	spitting, littering or urinating openly. iii) Leaving the					so that there will be less resistance as well as improve

(Vol. 47, Issue 01) and (Publishing Month: March 07, 2018) An Indexed and Referred Journal with Impact Factor: 2.80

			,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	esonline.com				
Risk Type	Risk Event	Risk Consequences (Opportunities/Th reats)	Risk Controls	Effectivene s s	Likeli hood	Consequenc es	Priorit y for RiskMi tigation	Risk Action
		benefits of free	DKCCDC					the
		services and may	premise as					control on

		www.ije	esonline.com		
	not get health care	soon as they			the
	and atu 1t- '11	ana d			avat
	and students will	are done			customer
	not get education or	with their			as well as
	got education of				ab 11011 ab

(Vol. 47, Issue 01) and (Publishing Month: March 07, 2018) An Indexed and Referred Journal with Impact Factor: 2.80

www.ijesomme.com	
training business.	lecture
iv) Employ	them on
some	the need
Some	the need

(Vol. 47, Issue 01) and (Publishing Month: March 07, 2018) An Indexed and Referred Journal with Impact Factor: 2.80

 1	w w w.ij	Somme.com			
	community				for
			1	]	
			1	]	
			ļ	ļ	
	members in				positive
					^
	 DKCCDC				behaviour
					55110.1001
1			1	]	
			1	]	
1			1	]	
			1	]	
			Ì	]	

		which will				to ensure
		WIIICII WIII				to ensure
		amant- :-1				thor
		create jobs in				they
		ın				
		the				cooperate
						_
 <u> </u>	L	l .	l	l	l .	

(Vol. 47, Issue 01) and (Publishing Month: March 07, 2018) An Indexed and Referred Journal with Impact Factor: 2.80

and reduce behave in		T	w w w.ij	esomme.com		1	
and reduce behave in			community				and
					1	1	
			and raduce		İ		hehave in
resistance to a			and reduce				benave III
resistance to a					1	1	l l
resistance to a							
resistance to a	[				1	1	
resistance to a							
resistance to a							
resistance to a							
resistance to a							
resistance to a							
resistance to a							
resistance to a							
resistance to a							
resistance to a							
resistance to a							
resistance to a							
resistance to							
resistance to							
resistance to a							
resistance to a							
resistance to							
resistance to a							
resistance to a							
resistance to a							
resistance to a							
resistance to a							
resistance to a							
resistance to a a							
resistance to a					1	1	
resistance to a			 		<u></u>	 <u></u>	<u> </u>
			 resistance to				а
			10010tallee to				u
					1	1	
				ĺ	1	1	
				ĺ	1	1	
				ĺ	1	1	
				ĺ	1	1	
		•					
			•	1	1	1	
							1

	 www.1je	esonline.com			
	DKCCDC				sustainabl
			1		
	operations				e manner
	operations		1		e manner
			1		
			1		
			1		
			1		
			1		
-	 			 	for
			1		
			1		
			1		
			1		
			1	1	

(Vol. 47, Issue 01) and (Publishing Month: March 07, 2018) An Indexed and Referred Journal with Impact Factor: 2.80

ISSN (Online): 2319-6564 www.ijesonline.com

			www.ije	esoniine.com			
Customers	DKCCDC	Opportunity More automore as	DKCCDC	Implementi	6	More customers	DKCCDC should look
	customers are not attracted to DKCCDC service and do not attend to/visit DKCCDC services	More customers are likely to visit DKCCDC and more poor will be benefitted which is the core objective of DKCCDC.  Threat If customers don't turn out and receive DKCCDC services this will ultimately lead to nonfulfillment of DKCCDC mission. Moreover, the poor will loose the benefit of free education and health care which is the degradation of society.	can consider implementin g ISO 9000 and ISO 26000 quality control which will help them be more responsible to customers and better customer control  i) DKCCDC works with communities , schools and other stakeholders such as schools and hospitals to send their patients/stud ents to DKCCDC for better services ii) Advocate to the customers on the need of education for personal and social development and remove illiteracy.	n g of ISOs is likely give a boost to DKCCDC operations  Effectivene s s of this approach is high. However, the biggest challenge is to motivate the students to come to school and make them see the need for schooling in life		are likely to visit DKCCDC and more poor will be benefitted which is the core objective of DKCCDC.  More customers are likely to visit DKCCDC	should look for continuou s improvem ent in services through customer survey and improvem ent of facilities  DKCCDC should strongly advocate in communit y centers, schools and even through TV advertise ment the need for an educated and skilled underprivi leged workforce as well as a healthy citizen and welcome

## 9. FINANCIAL SUSTAINABILITY

Financial sustainability refers to the ability to maintain financial capacity over time.

Regardless of an organization's for-profit or nonprofit status, the challenges of establishing financial capacity and financial sustainability are central to organizational function. However, maintaining the ability to be financially agile over the long term may be especially important for nonprofits, given that many of them serve high-need communities that require consistent and continually available services. With this in mind, the goal of financial sustainability for nonprofits is to maintain or expand services within the organization while developing resilience to occasional economic shocks in the short term (e.g., short-term loss of program funds, monthly variability in donations). For most nonprofits, such as DKCCDC, a core challenge is balancing (1) the need to maintain financial sustainability and (2) the pursuit of organizational mission and maintenance of consistent and quality programming over time.

DKCCD's main financial support and resource is through philanthropic donations of its founder and director. The positive side of this is that DKCCDC is highly focused in achieving its mission as its objectives are not clouded due to donations

from others. However, the negative side is that this total dependence on one individual for its financial resource, makes DKCCDC vulnerable. Therefore, DKCCDC needs to strengthen its financial sustainability by arranging other sources of finance through other individual, institutional or governmental support though this may be at the risk of diluting DKCCDC's objectives and values. Therefore, the founder is now in the process of forming a trust which will enable the long term financial sustainability of DKCCDC and also trying for collaborations with like minded philanthropists for funding where the fund does not have been refunded which is called a Big Bettor strategy for funding (Foster, 2009)

## 9. . SUSTAINABILITY AND RESILIENCE

Approach is on helping meet its objectives in an uncertain (VUCA – Volatility, uncertainty, complexity and unambiguity) world and this is sustainability. Therefore, all operations at must consider VUCA which are potential risks to the operations.

For , resilience is a never- ending journey that uses a risk management focus an organization – its people, knowledge, technology, finance, sense making and decision making which will help to survive and thrive in turbulent times. By creating an organization that is adaptable, competitive, agile and robust, becomes able to anticipate, prepare for, respond and adapt to sudden and gradual change in its external environment (context), particularly with respect to community satisfaction and to obtain Social License to Operate. If we do not adapt to changes in the external context it will not meet their objectives. By creating an organization that is adaptable, competitive, agile and robust, we are creating its ability to anticipate, prepare for, respond and adapt to sudden and gradual change in its external environment (context).

## 10. SCOPING WITH VALUE CHAIN MODEL

Approach to the value chain is based on the process view of organizations, the idea of seeing a manufacturing (or service) organization as a system, made up of subsystems each with inputs, transformation processes and outputs. Inputs, transformation processes, and outputs involve the acquisition and consumption of resources - money, labour, materials, equipment, buildings, land, administration and management. How value chain activities are carried out determines costs and affects profits. These activities can be classified generally as either primary or support activities that all businesses must undertake in some form.

DKCCDC value chain fits well in to the above Porter's Model. However, I will

ISSN (Online): 2319-6564 www.ijesonline.com

make the following changes to the Porter; s model to fit DKCCDC situation:

- Under Primary Activities, instead of "Marketing & Sales", I will apply the term "Advocacy and Promotion" as DKCCDC being a nonprofit organization, is not involved in any marketing and sales. Further, DKCCDC conducts various levels of Advocacy and promotion of its services to its internal and external stakeholders.
- There is no outbound logistics for DKCCDC as such however, cured patients or educated children may be considered
- Under support activities, I will add "Innovation"
- Lead measures for support activities and lag measures for primary activities
- The concept of shared value within the context of DKCCDC may be less appropriate as DKCCDC is already in the business of serving the community. However, value can be shared with suppliers.

## 10. MONITORING AND MEASUREMENT

## **Approach to Monitoring**

Monitoring involves the routine surveillance of actual performance against target so that there can be an accurate comparison with the expected or required performance.

DKCCDC needs to determine the method used for monitoring that is consistent with the measurement method selected. DKCCDC can use the Plan-Do-Check-Act model against target KPIs to monitor how well it is doing against the objectives and what actions to be taken where DKCCDC is not meeting the objectives.

## **Approach to Measurement**

Primary use of monitoring and measurement is the linkage of the support elements at the top of the value chain with the operations at the bottom. Therefore, the value chain model is useful in scoping the monitoring and measurement program for DKCCDC.

Lead and Lag Measures are as follows:

Lead measures are about strategic or future whereas lag measures are of what happened in the past.

Lead and Lag Measures for DKCCDC are as follows:

The following lead and lag measures have been developed from the Value Chain above

### **Lead Measures**

## **Hospital**

i)New medicines introduced each quarter, ii)new medical services introduced every quarter, iii)extent of engagement of the community members, iv)amount of community support service carried out each year, v)new investment made each year on medical program and infrastructure vi) level of customer engagement in DKCCDC vii) Implementing lead measures on operations of DKCCDC as indicated

## **School/Training Center**

i)No. of new courses and vocational training introduced each year ii) extent of engagement of the community members iii) amount of community support service carried out each year, iv)new investment made each year on school program and infrastructure, v) level of customer engagement, vi)promotional expenditure yearly to promote DKCCDC to its customers vi) innovating new ways to propagate education in poor areas of Bolpur e.g. snr. DKCCDC students are teaching basic mathematics,

SSN (Online): 2319-650 www.ijesonline.com

English and environment care to small needy students in their neighborhood/community and making their community a literate one. Vi) No. of new advocacies carried out to retain good teachers at less than market rate salary

## Lag Measures

## Hospital

No.of patients treated per week, How soon patients return after treatment, weekly expenditure on medicines, customer satisfaction rating, staff expenditure monthly, diagnostic and laboratory expenditure per month, No. of staff leaving DKCCDC each year.

## **School/Training Center**

Attendance record of students, Examination passing rates of students, No. of students getting jobs after vocational training, customer satisfaction rating, staff expenditure monthly, No. of staff leaving DKCCDC each year

## 11. TRANSPARENCY AND ACCOUNTABILITY

## **Approach to Transparency**

In the practice of sustainability, DKCCDC is expected to be transparent in its decisions and activities that impact on the environment, society or the economy. As such, DKCCDC is expected to disclose in a clear, accurate, and complete manner, and to a reasonable and sufficient degree, the policies, decisions and activities for which it is responsible to its stakeholders, society, the economy and the environment. DKCCDC is currently doing this in an inconsistent manner without complying with any specific requirements.

## **Accountability**

In the practice of sustainability, an organization is expected to be accountable for its impacts on the environment, society and the economy. It is well accepted that accountability involves an obligation of the organization to be answerable to legal authorities with regard to laws and regulations. However, the concept of accountability is expanded by sustainability to include a similar obligation for the overall impact of decisions and activities on the environment, society and the economy to those affected by its decisions and activities, as well as to society in general. DKCCDC does take accountability by engaging the neighbors in the community where it operates through satisfaction surveys and complying with their requirement in these three areas.

## 12. MATURITY OF THE SUSTAINABILITY PROGRAM

## **Conducting Self Assessment**

Approach to self assessment should be comprehensive and systematic review of the DKCCDC activities and its sustainability performance in relation to its degree of maturity. The results of the monitoring and measurement should be input to the self-assessment.

## **Approach to Maturity Plot**

Upon completion of self assessment, DKCCDC can decide how to characterize the five maturity levels as follows:

1. Beginner 2. Proactive 3. Flexible 4. Innovative 5. Sustainable or level 1 to 5 can be used.

## International Journal of Engineering Sciences Paradigms and Researches (IJESPR) (Vol. 47, Issue 01) and (Publishing Month: March 07, 2018)

An Indexed and Referred Journal with Impact Factor: 2.80 ISSN (Online): 2319-6564

SN (Online): 2319-650 www.ijesonline.com

## 13. Conclusion

Based on the sustainability tools discussed above, it is clear that an organization can become sustainable operationally as well as in terms of its impacts in the society in which it operates. An organization can self monitor its maturity level for sustainability as well as check how to adjust the environmental, social and economic impact of its operations with the best interest of its stakeholders. Ultimately, the article addressed the problem of how to make an organization sustainable in terms of reaching its goals as well as meeting operational sustainability requirements.

## REFERENCE

- [1] Pojasek, R. B. (2010). Quality toolbox: Sustainability: The three responsibilities. Environmental Quality Management, 19(3), 87–94.
- [2] Pojasek, R.B. (2012). Quality Toolbox: Understanding Sustainability: An Organizational Perspective. Environmental Quality Management, 93-100.
- [3] Identifying and Analyzing Stakeholders and Their Interests. (n.d.). Retrieved April 20, 2015, from http://ctb.ku.edu/en/table-of-contents/participation /encouraging-involvement/identify-stakeholders/main
- [4] B.Klaus, (September, 2012)Building capacity in NGO Risk Management, Retrieved April 20, 2015, http://www.thesustainablengo.org/improving-capacity/building-capacity-in-risk-management
- [5] India Community Protocol for Accounting & Reporting Greenhouse Gas Emissions. Retrieved March 20, 2016 from: http://urbanlowcarbonfinance.iclei.org/resources/ICP-Draft\_Dec\_2012.pdf
- [6] Institute for Global Environmental Strategies: List of Grid Emission Factor. Retrieved March 15, 2016 from http://pub.iges.or.jp/modules/envirolib/view.php?docid=2136
- [7] Regional and Sectoral Assessment of Greenhouse Gas Emissions in India.

  Retrieved March 15, 2016 from http://www.decisioncraft.com/energy/papers/ecc/ei/ghgei.pdf
- [8] CO2 emissions structure of Indian economy. Retrieved March 16, 2016 from http://www.irade.org/egy\_2307-with-corrections.pdf
- [9] India GHG Program: India Specific Road Transport Emission Factors. Retrieved March 20, 2016 from http://indiaghgp.org/sites/default/files/Road%20Transport%20Technical%20Paper.pdf
- [10] Calculations and Emission Factors. Retrieved March 20, 2016 from http://www.carbonneutralcalculator.com/Carbon%20Offset%20Factors.pd f
- [11] The Climate Registry. Retrieved March 20, 2016 from https://www.theclimateregistry.org/wp-content/uploads/2015/04/2015-TCR-Default-EF-April-2015-FINAL.pdf
- [12] Aashe: Setting Emissions Targets and Measuring Progress. Retrieved March 19, 2016 from http://www.aashe.org/wiki/cool-campus-how-guide-college-and-university-climate-action-planning/7-setting-emissions-target
- [13] Increasing Energy- And Greenhouse Gas-Saving Behaviors Among Adolescents: A School-Based Cluster-Randomized Controlled TriaL. Retrieved March 17, 2016 from http://web.stanford.edu/group/peec/cgi-bin/docs/behavior/research/highschoolcurriculum/curriculum%2045%20final%20.pdf

- [14] Summary of Emissions Factors for the Guidance for Voluntary Corporate
  Greenhouse Gas Reporting 2015. Retrieved March 31, 2016 from:
  https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/voluntary-ghg-reporting-summary-tables-emissions-factors-2015.pdf
- [15] GHG Inventory report for Electricity generation and consumption in India 2009-10. Retrieved March 12, 2016 from http://cbalance.in/wpcontent/uploads 2013/01/cbalance\_white-paper\_Electricity-emission-factors\_28Dec2012\_revised\_V21.pdf
- [16] CO2 emissions structure of Indian economy. Retrieved March 16, 2016 from http://www.irade.org/egy\_2307-with-corrections.pdf
- [17] India GHG Program: India Specific Road Transport Emission Factors. Retrieved March 20, 2016 from http://indiaghgp.org/sites/default/files/Road %20Transport%20Technical%20Paper.pdf
- [18] Calculations and Emission Factors. Retrieved March 20, 2016 from http://www.carbonneutralcalculator.com/Carbon%20Offset%20Factors.pd f
- [19] The Climate Registry. Retrieved March 20, 2016 from https://www.theclimateregistry.org/wp-content/uploads/2015/04/2015-TCR-Default-EF-April-2015-FINAL.pdf
- [20] Aashe: Setting Emissions Targets and Measuring Progress. Retrieved March 19, 2016 from http://www.aashe.org/wiki/cool-campus-how-guide-college-and-university-climate-action-planning/7-setting-emissions-target
- [21] Increasing Energy- and Greenhouse Gas-Saving Behaviors among Adolescents: A School-Based Cluster-Randomized Controlled Trial.
- [22] Retrieved March 17, 2016 from http://web.stanford.edu/group/peec/cgi-bin/docs/behavior/research/highschoolcurriculum/curriculum%2045%20final%20.pdf
- [23] Summary of Emissions Factors for the Guidance for Voluntary Corporate
  Greenhouse Gas Reporting 2015. Retrieved March 31, 2016 from:
  https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/voluntary-ghg-reporting-summary-tables-emissions-factors-2015.pdf
- [24] Cagnnin, CH, Loveridge, D, and Bulter, J. 2005. *Business sustainability Maturity Model*. Retrieved from http://www.crrconference.org/previousconferences/bse2005/proceedings/cristianohugocagnindenisloveridgeandjeffbu.html