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CHIEF EDITOR

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PRINCIPAL
SHREE H.S.SHAH COLLEGE OF COMMERCE
Modasa Dist- Arrvalli

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Editor's Column

The blast of knowledge at the universal hut due to scientific dynamics has without doubt redefined the very concept of new Era. The main set-up of education especially higher education-has become a subject of study and scrutiny for the scholars and practitioners who have a hunger desire to face change and challenges. It is because we, the creature beings, are brilliant with the faculty of option and a liberated will.

Unlike other type, we are not planned. We can make choices and use our free will to act and get our objectives. Inequities in learning opportunities, quality of educational military and level of learning success persist by gender, rural/town locality, ethnic backdrop, and socioeconomic status.

The quality of education and the aptitude to define and monitor this quality is absent in most upward countries. The means and span of education continue to be fine and curbed to past models of delivery, and the use of other channels continues to be informal and subsidiary. The increase in quantitative and qualitative demand for education is not in step by an raise in funds.

At this point in time, it is safe to situation that the split of views on the risk of change is marvelous. We, the publishers of Research Genius E Journal, are very much eager to view some aspect of these changes through academic article contributed by impressive scholar and social group. The nearby issue contains papers with decisive coming and scrutiny as well as orderly argument and reflection on various theme of language, prose, information technology, commerce and so on. We trust this will positively be helpful for the community who desire transform.

Chief-Editor

Dr. Sudhir G. Joshi

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"ગુજરાત રાજ્યની તુલનામાં અરવલ્લી જિલ્લાના આર્થિક આંતરમાળખાનો અભ્યાસ"

કેતન આર.ભોઇ
પી.એચ.ડી, વિદ્યાર્થી
હેમચંન્દ્રાચાર્ય ઉત્તર ગુજરાત યુનિવર્સીટી પાટણ

Abstract (તારણ,સાર) :

દેશ કે રાજ્યના વિકાસમાં આંતરમાળખુએ મહત્વનું છે. જેમાં ગુજરાત રાજ્યમાં આર્થિક આંતરમાળખામાં ઉર્જા, બંદર, રસ્તાઓ, રેલ્વે, હવાઈમથક,ગેસ અને સંદેશાવ્યવહાર નો ઝડપથી વિકાસ થઈ રહ્યો છે. જેના થકી ઔદ્યોગિક ક્ષેત્રનો પણ ઝડપથી વિકાસ થાય છે. ગુજરાત રાજ્યમાં અરવલ્લી જિલ્લામાં ઉર્જા વપરાશમાં કૃષિ ક્ષેત્ર આવે છે ત્યારબાદ ઔદ્યોગિક ક્ષેત્ર આવે છે. ગુજરાત રાજ્યની સરખામણીમાં અરવલ્લી જિલ્લામાં રેલ્વે નેટવર્ક ઓછું છે. ઔદ્યોગિક માલ પરિવહન માટે સમસ્યા કહી શકાય જ્યારે સંદેશાવ્યવહારનું પ્રમાણ ઓછું

૧.પ્રસ્તાવના:

આંતરમાળખુએ એવી વ્યવસ્થા કે સગવડોના સમૂહનો નિર્દેશ કરે છે કે જેમાં દેશના વિકાસ માટે અત્યંત આવશ્યક હોય છે. અર્થતંત્રમાં રહેલા આ માળખામાંથી મળતી સેવાઓ ખરીદનાર અને વેચનાર વચ્ચે ચીંજવસ્તુઓ અને સેવાઓના પ્રવાહને સરળ બનાવે છે. જેમ કે રેલ્વે, ડેમ, નહેર, વિદ્યુતમથકો, વિમાનીમથકો, સંદેશાવ્યવહાર, માર્ગ પરિવહન વગેરે સેવાઓ કાયમી પ્રકારની હોય છે. આ તમામ એવી સેવાઓ છે કે જે કાયમી પ્રકારની હોય છે. અને તેનો લાભ દેશના અર્થતંત્રને લાંબા સમય સુધી મળે છે. દેશના વિકાસના પાયાની સવલતો ધરાવતા માળખા ને મુખ્ય બે વિભાગમાં વહેચવામાં આવે છે.

(અ) આર્થિક આંતરમાળખું
(બ) સામાજિક આંતરમાળખું

આર્થિક આંતરમાળખાના (૧) ઉર્જા, (૨) વાહનવ્યવહાર અને (૩) સંદેશા વ્યવહાર એમ ત્રણ મુખ્ય ઘટકો છે.

૨. અભ્યાસના હેતુઓ:

૧. ગુજરાત રાજ્યમાં આર્થિક આંતરમાળખાનો અભ્યાસ કરવો.
૨. અરવલ્લી જિલ્લામાં આર્થિક આંતરમાળખાનો અભ્યાસ કરવો

૩. સંશોધન પદ્ધતિ:

કોઈપણ સમસ્યાના પ્રશ્નના અભ્યાસ માટે તે પ્રશ્ન અંગે માહિતી એકઠી કરવામાં આવે છે. કોઈપણ આંકડાકીય તપાસ દ્વારા મેળવેલ માહિતી સાચી અને યોગ્ય હોવી જોઈએ, નહિ તો ઉપયોગી અને સ્વીકૃત તારણો મેળવી શકાય નહિ. માહિતી પ્રાથમિક(Primary Data) અથવા ગૌણ માહિતી(Secondary Data) એમ બે પ્રકારની હોઈ શકે છે.

(અ) પ્રાથમિક માહિતીનો અર્થ :

"કોઈપણ અધિકૃત સંસ્થા કે સંશોધકો દ્વારા સૌ પ્રથમ વખત અસલ સ્વરૂપે માહિતી એકઠી કરાયેલ હોય તેવી માહિતીને પ્રાથમિક માહિતી કહેવાય છે" દા.ત.,NSSO દ્વારા એકત્રિત કરાયેલ માહિતી ભારતની વસ્તી-ગણતરીની માહિતી અને ભારતના રજિસ્ટ્રાર ઓફિસ, ન્યૂ દિલ્હી દ્વારા ભારતમાં મૃત્યુદર અને જન્મદરને લગતી માહિતી પ્રકાશિત કરેલ માહિતીને પ્રાથમિક માહિતી કહેવામાં આવે છે. આ સંશોધન અભ્યાસમાં પ્રાથમિક માહિતીનો ઉપયોગ કરવામાં આવશે.

- પ્રાથમિક માહિતી એકત્રિત કરવાની રીતો :

પ્રાથમિક માહિતી એકત્રિત કરવાની ઘણી બધી રીતો પ્રચલિત છે. સામાન્ય રીતે પ્રત્યક્ષ તપાસ, પરોક્ષ તપાસ, ટેલિફોન અથવા ઈ-મેલ દ્વારા તપાસ, પ્રશ્નાવલિની રીત, સ્થાનિક ખબર પત્રીઓ દ્વારા તપાસ જેવી પદ્ધતિઓ પ્રાથમિક માહિતી એકત્રીત કરવા માટે વપરાય છે. પ્રાથમિક માહિતી મેળવવા માટેની મુખ્ય રીતો નીચે મુજબ છે.

૧) પ્રત્યક્ષ તપાસ, ૨) પરોક્ષ તપાસ અને ૩) પ્રશ્નાવલિની રીત.

(બ) ગૌણમાહિતી :

જ્યારે કોઈ સંસ્થા કે સંશોધક કોઈ અંત સંસ્થા કે સંશોધક દ્વારા એકત્રિત કરાયેલ માહિતીનો ઉપયોગ કરે તો આવી માહિતી ઉપયોગ કરનાર સંસ્થા કે સંશોધક માટે ગૌણ માહિતી બની જાય છે. દા.ભારતની રજિસ્ટ્રાર ઓફિસ, ન્યૂ દિલ્હીદ્વારા એકત્રિત કરાયેલ ભારતના મૃત્યુદર અને જન્મદરને લગતી માહિતી ફરીથી વખત UNO (United Nations Organization) દ્વારા U.N. Statistical Abstractમાં પ્રકાશિત કરવામાં આવે છે. અહિયા UNO માટે આ માહિતી ગૌણ બનશે. પ્રસ્તુત અભ્યાસમાં ગૌણ માહિતીનો ઉપયોગ કરવામાં આવશે.

- ગૌણ માહિતી એકત્રિત કરવાની રીતો :

ગૌણ માહિતી મેળવવા માટેની મુખ્યત્વે બે પ્રાપ્તિ સ્થાનો છે.

૧) પ્રકાશિત પ્રાપ્તિ સ્થાનો દ્વારા ગૌણ માહિતી અને ૨) બિન પ્રકાશિત પ્રાપ્તિ સ્થાનો દ્વારા ગૌણ માહિતી

પ્રસ્તૃત સંશોધન લેખમાં ગૌણ માહિતીનો ઉપયોદ કરવામાં આવેલ છે.

૪. ગુજરાત રાજ્યની તુલનામાં અરવલ્લી જિલ્લાના આંતરમાળખાનો અભ્યાસ:

૧) ઉર્જા

- વર્ષ ૨૦૧૭-૧૮ના ગુજરાત રાજ્યના કુલ વીજ વપરાશ ૮૫૪૪૫ મીલીયન યુનિટની સામે વર્ષ ૨૦૧૮-૧૯ માં વીજ વપરાશ ૯૨૫૨૦ મીલીયન યુનિટ હતો સૌથી વધુ વીજ વપરાશ ઔદ્યોગિક અને વાણિજિયકનો ૫૩૪૪૭ મીલીયન યુનિટ(૫૭.૭૭ ટકા) હતો. ત્યારબાદ ખેતીનો ૧૯૭૮૯ મીલીયન યુનિટ (૨૧.૩૯ ટકા), ઘરગથ્થુનો ૧૫૪૪૩(મીલીયન યુનિટ(૧૬.૬૯ ટકા), જાહેર દિવા બત્તી અને વોટરવર્ક્સનો ૨૩૯૦ મીલીયન યુનિટ (૨.૫૮ ટકા) અને અન્ય વપરાશનો ૧૪૫૧ મીલીયન યુનિટ (૧.૫૭ ટકા) નોંધાયેલ હતો[1].
- અરવલ્લી જિલ્લામાં તમામ શહેરી વિસ્તાર અને તમામ વસવાટી ગ્રામ્ય વિસ્તારમાં બધા હેતુ માટે વીજળીકરણ થયેલ છે.
- અરવલ્લી જિલ્લામાં કુલ ૧૭૨ ભારે ઔદ્યોગિક વીજ કનેકશન આપવામાં આવેલ છે. જ્યારે ૨૦૭૫૭ વીજ કનેકશન હળવા ઔદ્યોગિક અને વાણિજ્યિક એકમોને આપવામાં આવેલ છે.
- જિલ્લામાં કુલ વીજ વપરાશ ૩૬૭૫૧૮૬૭૦ (૦૦૦ યુનીટ) માં છે. જેમાં ઔદ્યોગિક વીજ વપરાશ ૩૩૦૪૨૫૧૩ (૦૦૦ યુનીટ) માં છે. જ્યારે ખેતી/સિંચાઇ ૧૧૭૫૪૨૨૮૬ (૦૦૦ યુનીટ) છે. જેથી કહી શકાય કે ઔદ્યોગિક વીજ વપરાશનું પ્રમાણ ખેતી/સિંચાઇની સરખામણીમાં ઓછું છે[×].

૨) બંદર

ગુજરાત રાજ્ય ૧૬૦૦ કિલોમીટર લાંબો દરિયા કિનારો ધરાવે છે, જે ભારતના પાણીના ભાગમાં એક ચતુર્થાંશ દર્શાવે છે. વિશાળ ઉત્તરી અને મધ્ય ભારતીય પટ્ટામાં સેવા આપવા માટે ગુજરાત વ્યૂહાત્મક છે. રાજયમાં ૪૦ નાના અને મધ્યવર્તી બંદરો છે, જે રાજ્યભરમાં ભૌગોલિક રીતે વિખેરાય છે – દક્ષિણ ગુજરાત (૧૩), સૌરાષ્ટ્ર (૨૩) અને કચ્છ (૪), ઉપરાંત કંડલા ખાતેના એક મુખ્ય બંદર ઉપરાંત, જે ભારત સરકાર હેઠળ છે[3].

૩) રસ્તાઓ

- ગુજરાત રાજ્યમાં વર્ષ ૨૦૧૬-૧૭ ના અંતે રસ્તાઓની કુલ લંબાઇ ૮૧૨૪૬ કિ.મી. હતી. જેમાં રાષ્ટ્રીય ધોરીમાર્ગ ૫૧૪૬ કિ.મી., રાજ્ય ધોરીમાર્ગ ૧૭૨૪૮ કિ.મી., મુખ્ય જિલ્લા માર્ગો ૨૦૧૧૨ કિ.મી., અન્ય જિલ્લા માર્ગો ૧૦૨૫૯ કિ.મી. અને ગ્રામ્ય માર્ગો ૨૮૪૮૧ કિ.મી. હતો[4].

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[1] હુડા એસ.કે., સામાજિક આર્થિક સમીક્ષા,૨૦૧૯-૨૦, ગુજરાત રાજ્ય,અર્થશાસ્ત્ર અને આંકડાશાસ્ત્ર નિયામકશ્રીની કચેરી,ગુજરાત રાજ્ય,ગાંધીનગર, ફેબ્રુઆરી-૨૦૨૦ અંદાજપત્ર પ્રકાશન નં.૩૪. પી-૩૮

[2] જિલ્લાની આંકડાકીય રૂપરેખા વર્ષ ૨૦૧૯-૨૦ આંકડાશાખા, જિ.પં.અરવલ્લી વર્ષ ૨૦૧૯-૨૦

[3] https//ic.gujarat.gov.in/infrastructure.aspx.28/01/201812:31

[4] હુડા એસ.કે., સામાજિક આર્થિક સમીક્ષા,૨૦૧૯-૨૦, ગુજરાત રાજ્ય,અર્થશાસ્ત્ર અને આંકડાશાસ્ત્ર નિયામકશ્રીની કચેરી,ગુજરાત રાજ્ય,ગાંધીનગર, ફેબ્રુઆરી-૨૦૨૦ અંદાજપત્ર પ્રકાશન નં.૩૪. પી- ૪૧

- અરવલ્લી જિલ્લામાં ૨૨૬૬.૫૭ કિ.મી. રસ્તાઓ આવેલા છે. જેમાં રાષ્ટ્રીય ધોરીમાર્ગ ૩૨ કિ.મી.લ રાજ્ય ધોરીમાર્ગ ૪૯૧ કિ.મી.લ જિલ્લાના માર્ગ ૩૦૫.૫૭ કિ.મી.લ ગ્રામ્ય માર્ગ ૧૨૧૨ કિ.મી. અને અન્ય માર્ગ : ૨૨૬ કિ.મી[૫].

૪) રેલ્વે

- ગુજરાતમાં રેલ્વે લાઇનની કુલ લંબાઈ માર્ચ-૨૦૧૯ ના રોજ ૫૨૨૪ કિ.મી. હતી જે પૈકી બ્રોડગેજ ૩૬૪૯ કિ.મી., મીટરગેજ ૧૦૧૭ કિ.મી. અને નેરોગેજ ૫૫૯ કિ.મી. હતી[6].
- અરવલ્લી જિલ્લામાં કુલ રેલ્વે લાઇન ૩૮.૮૩ કિ.મી. છે. જે માત્ર બ્રોડગેજ લાઇન છે. જેમાં ૭ સ્ટેશનની સંખ્યા છે. જિલ્લામાં રેલ્વે લાઇનનું પ્રમાણ ઓછું છે[૭].

૫) હવાઈમથક

ગુજરાતમાં આંતરરાષ્ટ્રીય અને આંતરિક હવાઇ મથકોએ થયેલ વિમાન ઉડ્ડયનમાં વર્ષ ૨૦૧૬-૧૭ માં ૯.૯૩ ટકાનો વધારો થયેલ છે. મુસાફરોની સંખ્યા વર્ષ ૨૦૧૫-૧૬ માં ૮૧.૯૦ લાખ હતી હે વધીને વર્ષ ૨૦૧૬-૧૭ માં ૯૩.૭૫ લાખ થયેલ છે. માલસામાનની હેરફેરમાં વર્ષ ૨૦૧૫-૧૬ માં ૭૦.૧૯ હજાર ટન હતી જે વધીને વર્ષ ૨૦૧૬-૧૭ માં ૭૯.૯૦ હજાર ટન થયેલ છે[8].

ગુજરાત રાજ્યમાં ૧૯ હવાઈમથક આવેલા છે. આ હવાઈમથક પૈકી અમદાવાદ, વડોદરા, ભાવનગર, રાજકોટ, ડીસા, સુરત, કંડલા, પોરબંદર અને કેશોદ હવાઈમથકોનું સંચાલન ભારતીય હવાઈમથક ઓથોરીટી (એએઆઈ) દ્વારા થાય છે. જેમાં ડીસા અને પોરબંદર હવાઈમથક કાર્યરત નથી. આ ઉપરાંત ઈન્ડિયા એર ફોર્સ (આઈએએફ) દ્વારા ભુજ, નલિયા અને જામનગર હવાઈમથકોનું સંચાલન કરે છે. ગુજરાત રાજ્ય સરકાર મહેસાણા, અમરેલી અને માંડવી હવાઈમથકનું સંચાલન કરે છે. ખાનગી કંપની મીઠાપુર (ટાટા), મુન્દ્રા (અદાણી), દીવ અને દમણ હવાઈમથકનું સંચાલન કરે છે[9].

૬) ગેસ

ભારત દેશના કુલ ગેસ ઉત્પાદનમાં ગુજરાત રાજ્ય ૧૦ ટકા ઉત્પાદન ધરાવે છે. તેમજ દેશમાં ગેસ ઉત્પાદનમાં બીજો ક્રમ આવે છે. અંકલેશ્વર અને મહેસાણા દેશના પ્રારંભિક ગેસ ક્ષેત્રની શોધમાં સામેલ છે[10].

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[5] જિલ્લાની આંકડાકીય રૂપરેખા વર્ષ ૨૦૧૯-૨૦ આંકડાશાખા, જિ.પં.અરવલ્લી વર્ષ ૨૦૧૯-૨૦

[6] હુડા એસ.કે., સામાજિક આર્થિક સમીક્ષા,૨૦૧૯-૨૦, ગુજરાત રાજ્ય,અર્થશાસ્ત્ર અને આંકડાશાસ્ત્ર નિયામકશ્રીની કચેરી,ગુજરાત રાજ્ય,ગાંધીનગર, ફેબ્રુઆરી-૨૦૨૦ અંદાજપત્ર પ્રકાશન નં.૩૪. પી–૪૦

[7] સામાજિક-આર્થિક સમીક્ષા વર્ષ-૨૦૧૬ તથા ૨૦૧૯-૨૦ આંકડાશાખા, જિ.પં.અરવલ્લી વર્ષ-૨૦૧૬ તથા વર્ષ-૨૦૧૯-૨૦

[8] હુડા એસ.કે., સામાજિક આર્થિક સમીક્ષા (૨૦૧૭-૧૮) ગુજરાત રાજ્ય,અર્થશાસ્ત્ર અને આંકડાશાસ્ત્ર નિયામકશ્રીની કચેરી,ગુજરાત રાજ્ય,ગાંધીનગર, ફેબ્રુઆરી-૨૦૧૭-૧૮ અંદાજપત્ર પ્રકાશન નં.૩૪

[9] http://www.gidb.org/aviation-airport-infrastructure

[10] www.gidb.org/gas-current-scenario#01

ગુજરાત ઓઈલ અને ગેસનું ઉત્પાદન કરતી અગ્રણી રાજ્ય છે, અંકલેશ્વર અને મહેસાણા દેશના સૌથી પહેલા ના ગેસ ક્ષેત્રો છે. તાજેતર ના વર્ષોમાં, ગુજરાત ભારતની 'પેટ્રોકેપિટલ' તરીકે ઊભરી આવ્યું છે. આર્થિક પરિવર્તનના સંદર્ભમાં ફાયદાને ઉઠાવી લેવા માટે, રાજ્ય ૨૨૦૦ કિ.મી. લાંબી ઉચ્ચ દબાણ વાળી ગેસ ગ્રીડનું નિર્માણ કરે છે, જેનો હેતુ ગેસ ટ્રાન્સમિશન અને પુરવઠા બિંદુઓને માંગ કેન્દ્રોને વિતરણ કરવા માટે છે. આમાંથી ૧૧૩૪ કિ.મી. પાઈપલાઈન કાર્યરત છે. દેશના ગેસ ગ્રીડ માટે ગુજરાત એકમાત્ર રાજ્ય છે. તમામ મધ્યમ અને નાના ઉદ્યોગોને તેમની ઓપરેટિંગ કોસ્ટને નીચે લાવવા માટે ગ્રીડમાંથી ગેસ આપવામાં આવશે. આગામી બે થી ત્રણ વર્ષોમાં, ગેસ ગ્રીડ ગુજરાતનાં તમામ જિલ્લાઓમાં પહોંચવાની ધારણા છે અને ઔદ્યોગિક, વ્યાપારી અને સ્થાનિક ક્ષેત્રોની જરૂરિયાતને પૂરી કરશે. બે એલએનજી ટર્મિનલ એ ગેસની ઉપલબ્ધતામાં નોંધપાત્ર ઘટાડો કર્યો છે, જે કચ્છના સૌરાષ્ટ્ર અને મુંદ્રામાં પીપાવાવ ખાતે યોજાયેલી બે આગામી એલએનજી ટર્મિનલ દ્વારા આગળ વધારવામાં આવશે[11].

૭) સંદેશા-વ્યવહાર

- ગુજરાતમાં સારી રીતે વિકસિત ટેલિ-કોમ્યુનિકેશન નેટવર્ક છે. ગુજરાતમાં ૧૦૦ લોકોની વસતિ દીઠ ટેલિ-ડેન્સીટી ૧૦.૬૬ છે જ્યારે રાષ્ટ્રીય સરેરાશ ૮.૯૫ છે. દેશના ૬.૩૧ ટકા ટેલિફોન કનેક્શન્સ માટે ગુજરાતનો હિસ્સો જમીન-લાઈન અને સેલ્યુલર ટેલિફોન બંને દ્વારા થાય છે[12].
- અરવલ્લી જિલ્લામાં કુલ ૨૪૮ ટપાલ કચેરીઓ છે. જેમાં. મુખ્ય કચેરી ૨, પેટા કચેરી ૧૯ અને શાખાઓ ૨૨૭ છે[13]

૫. નિષ્કર્ષ

- ગુજરાત રાજ્યમાં સૌથી વધુ વીજ વપરાશ ઔદ્યોગિક અને વાણિજિયકનો છે. જયારે અરવલ્લી જિલ્લામાં સૌથી વધુ વીજ વપરાશ ખેતી/સિંચાઈનો છે. જ્યારે ઔદ્યોગિક વીજ વપરાશ ઓછો છે જેથી કહી શકાય કે અરવલ્લી જિલ્લામાં ઔદ્યોગિક વિકાસ ઓછો થયેલો છે.
- ગુજરાત રાજ્યના દક્ષિણ ગુજરાત, સૌરાષ્ટ અને કચ્છ વિસ્તારમાં દરિયા કિનારો આવેલો છે. જ્યારે અરવલ્લી જિલ્લામાં દરિયા કિનારો આવેલો નથી જેથી સ્વાભાવિક છે અહી બંદર ની સંખ્યા શૂન્ય છે.
- ગુજરાત રાજયમાં કુલ રસ્તાઓની લંબાઈમાં સૌથી વધુ ગ્રામ્ય માર્ગોના રસ્તાઓની લંબાઈ છે જ્યારે અરવલ્લી જિલ્લામાં ગ્રામ્ય માર્ગની લંબાઈ કુલ જિલ્લાના રસ્તાઓની લંબાઈમાં વધુ છે.

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[11] https//ic.gujarat.gov.in/infrastructure.aspx.28/01/201812:31

[12] Basant kumar (Joint Director) (ERO-STT) Govt. of. India, (2018) STT (T) Ministry of Communication, Department of Telecome

[13] જિલ્લાની આંકડાકીય રૂપરેખા વર્ષ ૨૦૧૯-૨૦ આંકડાશાખા, જિ.પં.અરવલ્લી વર્ષ ૨૦૧૯-૨૦

- ગુજરાત રાજ્યમાં કુલ રેલ્વે લંબાઈમાં બ્રોડગેજ લાઈનની લંબાઈ સૌથી વધુ છે જ્યારે અરવલ્લી જિલ્લામાં માત્ર બ્રોડગેજ લાઈન આવેલી છે.
- ગુજરાત રાજ્યમાં ૧૯ હવાઈમથક આવેલા છે. અરવલ્લી જિલ્લામાં શૂન્ય હવાઈમથક આવેલા છે. અરવલ્લી જિલ્લાનું નજીકનું હવાઈમથક અમદાવાદ ખાતે આવેલું છે.
- ગુજરાત રાજ્યમાં સારી રીતે વિકસિત ટેલિ-કોમ્યુનિકેશન નેટવર્ક છે. જ્યારે અરવલ્લી જિલ્લામાં ટપાલની કુલ કચેરીઓમાં મુખ્ય કચેરી માત્ર ૨ જ આવેલી છે જે ઓછી કહી શકાય.

૬. સંક્ષેપ

NSSO (National Sample Survey Organization)

UNO (United Nations Organization)

ચિંતા : શારીરિક અને માનસિક રોગો માટેનો જવાબદાર પરિબળ

ડો. કઠિયારા મોહમદહફિઝ એ.
મનોવિજ્ઞાન વિભાગ, આર્ટ્સ કોલેજ, મોડાસા

પ્રસ્તાવના :

આજનો યુગ ચિંતાનો યુગ છે.ચિંતાને અંગ્રેજીમાં Anxiety , કહે છે.ચિંતાનો અને ભય નો પારસ્પરિક સંબંધ છે.ચિંતાનો સંબંધ ભવિષ્ય સાથે છે.જ્યારે ભય વર્તમાન સાથે સંબધિત છે.ચિંતા સૌથી વ્યાપક વિકૃતિ છે. કેસલર ના મતે ચિંતા સામાન્ય કક્ષા નો માનસિક રોગ છે.।૧૯ ટકા પુરુષોમાં અને ૩૧ ટકા સ્ત્રીઓમાં કોઈ ને કોઈ પ્રકારની ચિંતા જોવા મળે છે. અમેરિકા માં એક સર્વે મુજબ ૫ ટકા લોકો ચિંતાગ્રસ્ત છે.

આજના આધુનિક તેમજ ઝડપી યુગમાં ડગલે ને પગલે હરીફાઈ , નિષ્ફળતા, દુઃખદ ઘટનાઓનો સામનો કરવો પડે છે.જેને લીધે વ્યક્તિ હતાશ થઈ જાય છે.તેમાંથી ચિંતાનો ઉદભવ થાય છે.ચિંતાની અસર સાહિત્ય , ધર્મ, સંસ્કૃતી , વિજ્ઞાન , કલા બધા ઉપર જુદા જુદા રૂપે દેખાય છે.

ડો, સિગ્મંડ ફ્રોઈડ ના મતે ચિંતા એ એવી મૂળભૂત ઘટના છે અને વિકૃતિ માનસનું એ મધ્યવર્તી ચિહ્ન છે. ચિંતા ની અસર આપણા મનોજગત પર પડે છે માટે તેનું સખતાઈપૂર્વક સામનો કરવો ફરજિયાત બની જતો હોય છે.

ટૂંકમાં એમ કહી શકાય કે કોઈપણ ઘટના જે વ્યક્તિના અસ્તિત્વ માટે ભય ઊભો કરે તો તેના પરિણામે ચિંતા જન્મે છે.

ચિંતાનો અર્થ:

લેહનેર અને કુયબ ના મતે વ્યક્તિની ઈચ્છાઓ અને સિદ્દિધઓ વચ્ચે જ્યારે મોટું અંતર હોય છે ત્યારે ચિંતા ઉદભવે છે.

એડલેર ના મતે આત્મ તંગદિલી વાળા અને કુસમાયોજન માં ચિંતાના સતત લક્ષણો જોવા મળે છે આ મુશ્કેલીઓ દૂર કરવાના પ્રયત્નો તરીકે વારંવાર પ્રતિક્રિયાઓ દ્વારા ચિંતા વ્યક્ત થાય છે .

ચિંતાના લક્ષણો :

ચિંતાના લક્ષણો બે પ્રકારના છે જેમાં માનસિક અને સારીરિક લક્ષણો સમાવેશ થાય છે.

ચિંતાના માનસિક લક્ષણમાં દર્દીને ભય અને આશંકા પરેશાન કરે છે તે ભય નું કારણ પોતે પણ જાણતો નથી.આવી આવી ચિંતા લાંબા સમય સુધી રહેતો વ્યક્તિની સ્મરણશક્તિ ઘટી જાય છે. બેચેની, અજંપો અને માનસિક તાણ અનુભવે છે . વ્યક્તિ નિરુત્સાહી દેખાય છે.

શારીરિક લક્ષણો માં હદય અને રુધિરાભિસરણ તંત્ર ને લગતા , શ્વસનતંત્રને લગતા, ચેતાતંત્ર ને લગતા , પાચનતંત્રને લગતા તરોગો પેદા થાય છે.

ચિંતાના વિવિધ સિધ્ધાંતો અથવા મનોૈજ્ઞાનિકોએ ના તારણો :

ફ્રોઈડ ના મતે ચિંતા એવી ભાવાત્મક અને દુઃખદ અવસ્થા હોય છે જે અહમને ઢોળાઈ રહેલા ભય થી સજાગ કરે છે જેથી વ્યકિત વાતાવરણની સાથે સાનુકૂળ રીતે વર્તન કરી શકે છે. બાહ્ય વાતાવરણમાં બાહ્ય વાસ્તવિક ભયની પ્રત્યે કરવામાં આવેલ આવેગિક પ્રતિક્રિયાઓને વાસ્તવિક ચિંતા કહેવામાં આવે છે. ઉદાહરણ તરીકે આગ, ભુકંપ વગેરેથી ડરીને ચિંતિત થવું e વાસ્તવિક ચિંતાનું ઉદાહરણ છે.જ્યારે અહમને ઉપરી અહમ પાસેથી ઈડની ધમકી મળે છે તો તેનાથી વ્યક્તિમાં નૈતિક ચિંતા ઉત્પન્ન થાય છે એટલે કે નૈતિક ચિંતાનું કારણ ઉપરી અહમ ઉપર અહમ ની નિર્ભરતા છે.જેના લીધે વ્યકિત માં દોષભાવ ,શરમ અને આત્મદોષ ની ભાવના ઉત્પન્ન થાય છે.

કારેન્ન હોરની ના મત મુજબ ચિંતા બાળકોમાં એકલા પણું અને નીસહાયતા ના ભાવથી ઉત્પન્ન થાય છે જે દ્વેષભાવ નું દમન કરવા સાથે જોડાયેલી હોય છે. ચિંતાને કારણે વ્યક્તિમાં મનોવિકૃત વ્યક્તિત્વ વિકાસ પામે છે. જ્યારે બાળકોને ઘરમાં વાસ્તવિક પ્રેમ અને સ્નેહ નથી મળતા તેમજ માતા-પિતા દ્વારા બાળકોને તિરસ્કાર મળે છે તો તેનામાં અસમર્થતા તથા અલગતા નો ભાવ વિકસિત થઈ જાય છે તથા તેઓ ભાવોને દૂર કરવાના અસફળ પ્રયત્નો પણ કરે છે તેનું સ્વભાવિક પરિણામ એ આવે છે કે તેનામાં દ્વેષ વિકસિત થાય છે જે ધીરે ધીરે તેને બીજાના પ્રત્યે આક્રમક બનાવે છે. તેનામાં દોષભાવ વિકસિત થાય છે. જેનું પહેલા એ દમન કરે છે પરંતુ પછી તેનાથી તેનામાં ચિંતા વિકસિત થાય છે.

બાળકોને ચિંતામાંથી બચાવવાની રીતો:

૧ સ્નેહ પ્રાપ્ત કરવો.

આમાં બાળકો બીજા પાસેથી સ્નેહ અને પ્રેમ મેળવવાનો પ્રયત્ન કરે છે તેના માટે તે હંમેશા આજ્ઞાનું પાલન કરવા તૈયાર રહે છે

૨ વિનમ્રતા બતાવવી.

વિનમ્રતા એ આત્મરક્ષા નો એક બીજો મુખ્ય ઉપાય છે તેમાં વ્યકિત કોઈ એક વ્યકિત કે પ્રત્યેક વ્યકિતના વિચારોને ઘણી વિનમ્રતાથી સ્વીકાર કરે છે.

૩ બીજા ઉપર નિયંત્રણ મેળવવું

જ્યારે વ્યકિત પોતાની જાતને બીજા થી ઉત્તમ સમજે છે તો એક રીતે નિસહાયતાની પૂર્તિ કરે છે. તથા સુરક્ષાના ભાવને મજબૂત કરે છે

ચિંતાનો પ્રકારો:

ફ્રોઈડ ના મતે ચિંતા ના પ્રકારો **માં** વિકૃતિ ચિંતા, વસ્તુલક્ષી ચિંતા અને નૈતિક ચિંતાનો સમાવેશ થાય છે.

જે સી.કોલમેન ના મતે ચિંતાના પ્રકારો માં મુકતાચારી વિકૃત ચિંતા અને નિશ્ચિત ચિંતા નો સમાવેશ થાય છે.

ચિંતાને અસરકર્તા કારણો

સેશવકાળ અને બાલ્ય અવસ્થા દરમિયાન દબાયેલી બાબતો પુખ્ત વયે વ્યક્તિઓની જિંદગી પર અસર કરે છે અને તે ચિંતા મા પરિણમે છે. ચિંતાના વિકાસમાં મુખ્ય ૪ પરિબળો કામ કરે છે

૧ આસપાસના સંજોગો

૨ દાબી રાખેલી લાગણીઓ

૩ શારીરિક કારણો

૪ વંશપરંપરાગત કારણો

ચિંતાનું મહત્વ

ચિંતાની વ્યક્તિ ના સામાજિક , મનોૈજ્ઞાનિક ,આર્થિક અને શારીરિક જીવન પર અસર પડે છે.

વણનાત્મક લેખની અગત્યતા:

આ લેખનો હેતુ છે કે આનાથી લોકો , વિદ્યાર્થી ઓ સજાગ થાય.કેમ કે ચિંતાનું પ્રમાણ દિન-પ્રતિદિન વધી રહ્યું છે તે માનવીના જીવનને કચરી નાખે છે.

ચિંતા એ એવો ઘટક છે કેજે કોઈપણ વ્યક્તિની સમસ્યા ના કેન્દ્રમાં રહેલ હોય છે પરિણામે સૌપ્રથમ આ ઘટક નું જ્ઞાન બધા માટે ઉપકારક નીવડશે.

शैक्षणिकविज्ञानदृष्ट्यापरिभाषेन्दुशेखरग्रन्थः

प्रस्तोता
डॉ.करशनः पीठीया
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शिक्षणंविकासकारिणीप्रक्रियायाम्अन्तर्निहितंज्ञानमेवकालानुगुणंविशेषपरिस्थितौप्रस्फुटितंजायते।इतिधियावैज्ञानिकशिक्षणंपारम्परिकशिक्षातःएवप्रस्फुटितंजायतेइतिनिश्चितंतत्व्याकरणग्रन्थेषुवर्ततेइतिआचार्यकक्षायांअध्ययनशीलःआसीत्तदानीमेवमदियोविचारःआगतः।अतःविषयोऽयंचितः।एतेनशोधपत्रेणपाश्चात्यानांभ्रान्तिःयत्प्राचीनशास्त्रेषुशिक्षणम्नास्तिइतिनिर्मूलनम्।तेनैवकारणेन

"शैक्षणिकविज्ञानदृष्ट्यानागेशभट्टेनकृतःपरिभाषेन्दुशेखरःग्रन्थःकथम्उपयोगी"
इतिअस्मिन्शोधपत्रेअल्पःप्रयासःकृतःअस्ति।

अद्यतनकालेशिक्षायाःह्रासःस्नातकोत्तरकक्षायांगत्वाऽपिछात्राःप्रायेणमाध्यमिकस्तरीयाःभवन्तितेषुतज्ज्ञानंस्तरानुगुणंकथम्स्यात्बुद्धिविकासःरूचेरुत्पादनंतेषुआवश्यकम्,
तदर्थमेववैज्ञानिकप्रक्रिययाशिक्षणंतेषुभवेद्इतिहेतोःएतत्परिशीलनम्आवश्यकम्आसीत्।

शिक्षाशास्त्रमेकंज्ञानशास्त्रम्,उच्चारणशास्त्रमिति, व्यवस्थापनम्तत्तत्स्थानीयाःवर्णाः, विभिन्नार्थस्यद्योतकाः, यथाशषसहाः, वर्णव्यवस्था, संश्लेषणम्, विश्लेषणम्, संयोजनम्, विच्छेदश्च, अर्थकथनम्, आख्यानम्, लक्ष्येनियोजनम्, सिद्धान्ताख्यानम्इत्यादिसर्वंविदुषाभट्टेनकृतम्तत्रएकानूतनादृष्टिरावश्यकी।

यन्नूतनंसाहित्यंतदेवरुचिकरंरमणीयञ्चअतःप्रथाभेदेनतदेवसिद्धान्ताःपुनराख्यापनीयाःबोधस्यनूतनाआयामाःस्युरितिकृत्वाशिक्षणमेकंविज्ञानम्, क्षाशब्दार्थःभारतीयदार्शनिकानांपाश्चात्यानांदृष्टिःशिक्षणस्यविविधाःअर्थाः, तस्यव्यापकत्वम्न्यूनत्वम्, औपचारिकमनौपचारिकम्उभयंपरिशील्यशिक्षणस्यप्रक्रियाहेतवः, जीवनस्यपूर्णलक्ष्यम्, शिक्षणस्यतत्त्वज्ञानम्, शिक्षणस्यविविधाःसिद्धान्ताः, अपेक्षावृत्तिः, जिज्ञासाप्रवृत्तिः, स्वभावःसमर्पणं, शिक्षणसूत्राणि,परिभाषेन्दुशेखरेबहुमुखीस्वतन्त्रताविज्ञानम्, परिभाषासुशिक्षणसिद्धान्ताःइतिबहवःशीर्षकाः भवितुंशक्नुवन्ति।अतः

शिक्षणविज्ञानम्

शिक्षणम्एकंविज्ञानंवर्तते।शिक्षणंक्रमशःप्रदीयते।एकस्यउपरिअपरस्यआधारशीलता,
क्रमबद्धताचभवति।क्रमबद्धतापरिभाषेन्दुशेखरेवर्तते।एकस्याःपरिभाषायाःअपरेणसहसम्बन्धःबाध्यबाधकभावश्चदृश्यते।द्वयोःतुल्यदेशतातुल्यबलत्वमेवबाध्यबाधकंबीजम्।

सामान्यतयासूत्राणांप्रवृत्तिर्विधानं, विधानेचनिषेधः, निषेधस्यचविधानंदृश्यते।तत्रकाश्चित्परिभाषाः, कानिचनवार्तिकानिचवर्तन्ते।परिभाषयाविधिसूत्राणांसहयोगःसहायतासाध्यते।अतःउभयोःउपकार्योपकारकभावः

सम्बन्धोजायते।लोकोपकारितायाःसिद्धान्तोविकसत्यनेन।परस्परसाहाय्यमेवगुणत्वस्यवर्धनेनवृद्धिःयथारासायनिकप्रक्रियायांमिश्रणंनूतनंद्रव्यंजनयतितद्वत्विधिपरिभाषयोःसम्मेलनेनकश्चननूतनार्थःलक्ष्यसाधकःयथा[14]व्यवहिताव्यवहितयोरेकोऽव्यवहितस्ययजादेशः।

सूत्रात्मकतयालक्षणंदृष्ट्वालाक्षणिकत्वात्एकमेवसूत्रेसप्तम्यन्तंपदंयत्रयत्रभवतितत्रतत्रलक्षणंलक्ष्यंदृष्ट्वा निर्मीयतेलक्षणंसर्वोपक्रान्तंभवतिसमग्रग्राही,नतुएकदेशी।यत्रकुत्रापिएकदेशीयतातत्रकश्चननिषेधकःभवति, उभयोःव्यवस्थाव्याकरणेशास्त्रेऽस्मिन्दृश्यते।

शिक्षणंप्रामाणिकंभवति।प्रमाणतयासिद्धंयत्किमपितल्लक्ष्यंनअतिक्राम्यति।यथाअनुबन्धाःबोधकस्यावयवाःभवन्ति।अवयवःबोधकेसहयोगंयच्छतियथाउक्ठञ्इत्यादिषुप्रत्ययेषुञित्वात्कित्वात्च "तद्धितेष्वचामादेः[15]" इत्यनेनवृद्धौजायतेतत्फलं-

मासिकम्इत्यादिप्रयोगाःसम्भवन्ति।अनुबन्धाःकुत्रचिद्गृह्यन्तेक्वचित्न,समन्वयःबालकस्यशिक्षणायसर्वोपकारकरणायसदार्द्रचित्ताइतिआगमसिद्धान्तानुगुणंसर्वोपकरणानिभवन्ति।किन्तुतानिसाधनानिनसाध्यानिइदंसर्वंसाध्यसाधकविचारेसाध्यमेवलक्ष्यं, साध्यं, ज्ञानंबालकस्ययोग्यता, संसाधननितुअनुबन्धानि अनुबन्धाःप्रतिबन्धकाःअतःतेषुअधिकःकालोनव्ययःकर्त्तव्यः।अयमेवसिद्धान्तः।

"गौणमुख्ययोःमुख्येकार्यसम्प्रत्ययः[16]"
इतिपरिभाषयामुख्येएवप्रत्ययःप्रधानंकल्पितंसमाजेशिक्षणेचप्रधानताप्राथमिकताकल्प्यते।प्रथमोपस्थितिःइतिज्ञानार्थंनिर्दिश्यमानइतिशब्दःप्रयुज्यते।

निर्दिष्यमानःनिर्उपसर्गपूर्वकःदिश्धातोरर्थःउच्चारणम्उच्चारणेनानुरूपंश्रवणंकार्यंसम्पद्यते।क्वचिच्छ्रवणेभिन्नःकार्यंभिन्नंतद्वोद्धुंबोधकयोःप्रत्ययाभावःप्रत्ययःनूतनोत्पत्तिः।

परिभाषेन्दुशेखरस्यपरिचयः

संस्कृतजगतिव्याकरणशास्त्रस्यमहत्त्वपूर्णंस्थानंवर्तते। "मुखंव्याकरणंस्मृतम्" इत्युक्त्यनुसारम्अस्यपुष्टिः जायते।व्याकरणानांवैविध्येसत्यपिपाणिनीयव्याकरणम्एवसर्वमान्यम्अस्ति।महर्षिपाणिनिना "अष्टाध्यायी" ग्रन्थः रचितः।अयंग्रन्थःविश्वव्याप्तःअस्ति।अस्यग्रन्थस्यविस्तृतंगभीरंचस्वरूपंपतञ्जलेःमहाभाष्येदृश्यते।पातञ्जलमहाभाष्यस्यप्रौढस्वरूपंदृष्ट्वाकैयटनागेशभट्टाभ्यांसूक्ष्मरहस्यानांप्रतिपादनंकृतम्।वैयाकरणजगतितयोःमहद्योगदानम्अस्ति।

यद्यपिपाणिनेःअष्टाध्यायी-ग्रन्थस्याधारेणकाशिकादयःग्रन्थाःअपिरचिताः, तथापितेषाम्आधारेणभट्टोजिदीक्षितेन, नागेशभट्टेनचइत्यादिभिःविद्वद्भिःप्रचालितानांपरम्पराणांसाम्प्रतमपिसंस्कृतजगतिविशिष्टंस्थानमस्ति।नागेशभट्टेन स्वप्रतिभयाइयंपरम्पराप्रकाशिता।तस्याधारेणबहूनांवैयाकरणग्रन्थाःनिर्मिताः।ताःग्रन्थाःव्याकरणशास्त्रस्यमानदण्ड स्वरूपेविद्वज्जगतिप्रसिद्धाःसन्ति।तेषुग्रन्थेषु**"परिभाषेन्दुशेखरः"**अपिअन्यतमःग्रन्थःअस्ति।

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[14]तस्मिन्नितिनिर्दिष्टेपूर्वस्य।

[15]अष्टाध्यायीसूत्रपाठः७/२/११७।

[16]परिभाषेन्दुशेखरः, शास्त्रत्वसम्पादनोद्देशप्रकरणम्, परिभाषा – १५।

शैक्षणिकविज्ञानदृष्ट्यापरिभाषेन्दुशेखरग्रन्थः

परिभाषेन्दुशेखरःइतिनामश्रवणेनएवव्यापकस्यअर्थस्यप्रतीतिर्जायते।यद्व्यापकंतदेवउपकारकं, सर्वशिक्षादायकंच।यावतीव्यापकतातावतीएवसफलता।यथाव्याकरणस्यअस्यपाणिनीयस्यलोपःशाकल्यस्यओतोगार्ग्यस्यईचाक्रमवर्णस्यइत्यादीनिसूत्राणितत्तन्महर्षीणांमतानांसङ्ग्रहंविधायपाणिनेःव्याकरणस्यउपयोगिताम्अधिकाधिकंकरयन्ति।तत्पाणिनेःव्याकरणस्यव्यापकतायाःसिद्धान्तः।परिभाषाणामपितावदेवव्यापकताम्आदायएषःग्रन्थः नागेशभट्टेनविरचितः।यत्रप्राचीनवैयाकरणानांव्याकरणशास्त्रेयाःपरिभाषाःताःवचनरूपेणपठिताः।पाणिनीयशास्त्रे ज्ञापिकाःपरिभाषाःलौकिकन्यायसिद्धाःपरिभाषाः, भाष्यकारानुमोदिताः, वार्त्तिककृदभिप्सिताःचपरिभाषाः अत्रसमाविष्टाः।तादृशीव्यापकतादृष्टिःयत्रयत्रशिक्षणेदृश्यते, तत्रतत्रशिक्षायाःक्षेत्रम्आधारश्चदृढतरोजायते[17]।व्यापकतायाःविज्ञानम्एवमनुष्यस्यसार्वभौमंलक्ष्यंप्रापयति।

यत्रव्यापकतातत्रमुखंसङ्कुचितंसीमितंचभवति।अतःपरिभाषाशास्त्रेप्रवेशायप्रथमतःशास्त्रस्यपरिभाषातदुद्देश्यंपुनश्चव्याख्यानस्यशैलीइत्येतत्सर्वमपिविज्ञानस्यकोटौआयान्ति।तदेवकोषकारेणअमरसिंहेनविज्ञानपदेनाभिहितंयत् - "मोक्षेधीर्ज्ञानमन्यत्रविज्ञानंशिल्पशास्त्रयोः"[18]। शास्त्रस्यशिल्पस्यचज्ञानंविज्ञानमितिउच्यते।अत्रक्रमपूर्विकाः परिभाषाःतत्रएकापिअपरयासहसम्बद्धाःलक्ष्यसाधनतत्पराः।पदच्छेदःपदार्थोक्तिःविग्रहसहिताःप्रतिपादिताः।अतएवसर्वाःपद्धतयः, प्रतिपादनशैलीअपिविज्ञानपूर्णा।तत्कारणादेवायंग्रन्थः, ग्रन्थकारस्य विविधविद्यालयेषुपाठ्यक्रमेषुइदनीम पिनिर्धारितोवर्तते।तदस्यग्रन्थकारस्यविज्ञानकारणादेव।

शास्त्रत्वमपिविज्ञानशब्देनैवाभिहितमतएवअर्वाचीनाःशैक्षणिकतकनीकिशब्दाःप्रयुक्ताःतत्रतकनीकिपदवाच्याःकेवलंसाधनभूतंसंगणकादियंत्रमेवनअपितुअन्तर्ब्राह्यविचाराणामालोडनेनसर्वग्राहीप्रक्रियायाचेतनतायाःस्पन्दनस्यचपोषिकायेनआन्तरिकंजगत्बाह्यजगच्चप्रभावितंजायते, लक्ष्यसाधकत्वमपितत्रभवतुलक्ष्यधर्मिता, परार्थ विचारः,शास्त्रीयप्रक्रियाज्येष्ठानुमोदितंव्यवहारोपयोगिलोकहितावहस्तद्वैज्ञानिकमितिउच्यते।लक्ष्यस्यालक्ष्यंयथाकेनचित्क्रियतेतदानीमेवशंसनात्शासनात्चशास्त्रस्यअस्यविज्ञानत्वंसिद्ध्यति।तएवपक्षाअत्रप्रकाशमानीताः।

परिभाषेन्दुशेखरेशिक्षणसर्वाङ्गीणविकासस्यसम्भावनावर्ततेनवा ?

व्याकरणस्यप्रयोजनंछात्रेषुशब्दज्ञानंतत्सम्बद्धार्थज्ञानंतथाचनूतनशब्दानांसंरचनास्वयमेवभवेत्तदर्थंपरिस्थित्युत्पादनमपिवर्तते।तत्रमहत्त्वपूर्णांशःस्वानुभवजन्यंज्ञानमेववास्तविकंज्ञानंप्रापयितुंशक्नुयात्।तेषुप्रयोजनविधौविविधसिद्धान्ताःवर्तन्ते।

१ **स्वभाविकतासिद्धान्तः**

२ **मनोवैज्ञानिकसिद्धान्तः**

३ **क्रियाशीलसिद्धान्तः**

४ **नियोजनसिद्धान्तः**

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[17]प्राचीनवैयाकरणतन्त्रेवाचनिकान्यत्रपाणिनीयतन्त्रेज्ञापकन्यायसिद्धानिभाष्यवार्त्तिकयोरुपनिबद्धानियानिपरिभाषारूपाणि तानिव्याख्यायन्ते। (परिभाषेन्दुशेखरः – मङ्गलाचरणेपृष्ठ२,)

[18]अमरकोशः

५ उद्देश्यसिद्धान्तःरुचेःसिद्धान्तः

६ वास्तविकतासिद्धान्तः

७ सामाजिकतासिद्धान्तः

८ स्वतन्त्रतासिद्धान्तः

९ उपयोगसिद्धान्तः

एतानिआधारीकृत्यानिसिद्धान्तानिप्रयोजनविधेःपरिकल्पितानिवर्तन्ते।तेषुप्रयोजनविधेःप्रयोगक्रमात्तस्मिन्पञ्चपदानिवर्तन्ते।येषुप्रप्रथमःपरिस्थित्युत्पादनम्।अत्रअध्यापकःछात्रेषुकार्यमारोपयति।छात्राःपरिस्थित्यनुगुणंस्वयमेववातावरणंपरिकल्प्यआकर्षयन्ति।तत्रविविधपरिकल्पनासुस्वरुच्यनुसारंछात्राःरुचिंप्रदर्शयन्ति।एतेनतेषुरुचेःसिद्धान्तःविकसितोजायते।अनेनप्रकारेणनागेशभट्टस्यपरिभाषेन्दुशेखरेशैक्षणिकविज्ञानंसमाहितम्अस्तिइति।

Guidelines forFormulation of Instructional and Behavioural Objectives With Reference To Teaching Life Science.

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Abstract:

"Science does not simply sit down & pray for things to happen, but seeks to find out why things happen. It experiments and tries again and again and sometimes fails and sometimes succeeds & so bit by bit it adds to human knowledge. This modern world of ours is very different from ancient world or the middle ages. This great difference is largely due to Science"- Pandit Jawahar Lal Nehru. Science is significant in school curriculum because man's future depends to a large extent on scientific advances & development of productive activity. Hence there is a great need to teach science in school curriculum. "We lay great emphasis on making science an important element in school curriculum. We, therefore, recommend that science and mathematics should be taught on compulsory basis to all pupils as a part of general education during first ten years of schooling. In addition there should be provision of special course in these subjects at the secondary stage, for students of more than average ability."- Kothari Commission. An objective is a point or an end view of the possible achievement in terms of what a pupil is to be able to do when the whole educational system is directed towards educational aim. These Objectives can be grouped into instructional and behavioural objectives.

Keywords:

Introduction:

Instructional objective refers to the statement that describes the ability of learner to do something after completion of instruction(Kibler. et al., 1974). In the book Preparing Instructional Objectives, Robert Mager defines objective as "a collection of words and/or pictures and diagrams intended to let others know what you intend for your students to achieve" (Mager, 1984). Thus objective does not describe the role of the instructor but the knowledge, attitudes and skills that the instructor wants to produce in learners. Instructional development requires the nature and characterization of the objectives to which instruction is addressed to. The attention is given to the analysing, identifying, and employing instructional objectives. The instructional objectives are of 2 types. The first being the terminal instructional objectives which are used to check progress at the end of a unit, course, school year, or designated level of instruction. Short term Instructional Objectives which are derived from terminal instructional objectives and designed to guide shorten range instruction forms the second type of instruction objective

Behavioural objective is a statement ability to do something as a consequence of instruction (Goodlad, 1969) A behavioural objective is a learning outcome stated in measurable terms, which gives direction to the learner's experience and becomes the basis for student evaluation. Objectives vary in several respects. They may be general or specific, concrete or abstract, cognitive, affective, or psychomotor. Cognitive objectives emphasize intellectual outcomes, such as knowledge, understanding, and thinking skills. Affective objectives emphasize feeling and emotion, such as interests, values, attitudes, appreciation, and methods of adjustment. Psychomotor objectives emphasize motor skills, such as physical assessment skills and administration of chemotherapy.For the formulation of good instructional and behavioural objectives, the student and their capabilities are to be kept in the mind. This review is focused on the formulation of the instructional and behavioural objectives for which the literature survey was done to identify the best way to formulate the instructional and behavioural objectives.

Methodology: Research and review papers published nationally and globally were searched for the keywords "Instructional objective" "Behavioural objectives" "Impact of objectives on the children" "Formulation of the objectives". The reports obtained were viewed in the light of formulation of instructional objectives with reference to teaching life science.

Objectives of the report: This report aims to find why and how the formulation of the teaching and learning objectives can be done for the life science.

Literature Survey:

In agreement with the imminence and accessibility of any expressed objectives, distinction has to be made between institutional, societal, and instructional decision (Goodlad, 1969). Eisner, 1983, states that belief is important in stating the instructional objectives. Franklin Bobbit in his book How to Make a Curriculum (1924), points out that statement of objective goal should be operational and should echo real time life experiences of the children(Bobbitt, 1924). Barton (1950) suggests using philosophical domains for structuring specific instructional outcomes.

Tyler (1950) is of belief that precisely defining the educational targets is most useful for choosing content, for advising learning activities, for influencing a type of instructional technique to follow, and for constructing criterion-referenced test items (TYLER, 1950).

According to Popham, (1969) the objectives should promote instructional decision-making processes; prescribe individually differentiated instructional configurations; offer a means to analyse learner entering behaviour; establish appropriate practice opportunities; determine enabling behaviours subsumable to the terminal task; and promote, when revealed, more relevant study behaviour on the part of students (Popham, 1969).

Hastings (1972) studied independent learning based on behavioural objectives to determine how true the statement "If you give each learner a copy of your objectives you may have little else to do" was. He presented the behavioural to a group of students without giving them formal classroom instruction. These people were then given mastery tests on an individual basis whenever they felt that they are prepared. A control group was taught utilizing the objectives in an instructor-oriented environment. Examinations for the control group was given at regular time. Results obtained showed that the experimental group scored higher on four unit examinations and the final examination (Hastings, 1972).

Long and Huck (1972) randomly assigned students of age under 19 to two groups. These groups were separated before the experiment. One group got a list of accurate instructional objectives. The other group had discussion on the unrelated topic. These 2 groups were then reunited and same lecture was given to them. After lecture a 12-item quiz from the lecture was given to both the group of the students. After the analysis of the result it was observed that the people having the prior knowledge of the instructional objectives had desirable effect on achievement in the field of learning(Long & Huck, 1972).

Merrill and Towle (1972) investigated the effect of objective availability on performance in computer-assisted graduate course. They randomly assigned students to the group that had objective and the group that did not. They observed that the group having the objectives showed decrease in the anxiety level as compared the control(Merrill et al., 1972).

Doty (1968) investigated the effect of prior knowledge of objectives along with the effect of practice on performance in a short written text on reading and calculating the value and tolerance of carbon axial resistors. The results showed that people who received objectives scored significantly higher on a post-test performance measurement(Dotty, 1968).

Dallis (1970) investigated the effect of the specificity of objectives on achievement in a three-week unit on growth and development. The pupils received one of three treatments: (a) precisely stated instructional objectives; (b) vaguely stated objectives; or (c) short paragraphs of health information. The vague objectives were similar to the precise objectives except that both the content and behavioural dimensions were general. Achievement on a 68-item criterion test indicated that the precisely stated objective group performed significantly better than the other two groups, which in turn did not differ significantly from one another(Dallis, 1970).

Oswald and Fletcher (1970) studied the effects of varying levels of specificity of objectives which dealt with either knowledge or comprehension outcomes. The pupils were divided into 4 groups and these four groups received either specific objectives or general objectives which were either knowledge objectives or comprehension objectives. The fifth group was different from the rest 4 as they received a placebo statement which was considered a non-objective. After giving 25 minutes as the reading time, the students were asked to give a 40 items post-test. The test was re-administered after a week for retention test. This result showed no significant differences in the test(Oswald & Fletcher, 1970).

The behavioural objectives, questions, and advanced organizers are included in the orienting instructions. Papay (1971) investigated the effects of types, location, and distribution of orienting instructions on the students and reported that behavioural objectives were least effective among the orientating instructions(Papay, 1971).

Mager and Clark (1963) reported the study by Mager and McCann. In this study, the engineering graduates participating in a six months specialization course were selected. They were provided with detailed course objectives. The classes were cancelled and the people were advised that they would have complete control over what they learned, when they learned it, and from whom they learned it. They were free to ask for instruction from any instructor. The students completed the 6 month course in the time of 7 weeks. Thus the time to complete the course was shortened by 65%. They were also better in the job, for which the course was designed, than the students who completed the course traditionally(Mager & Clark, 1963).

With reference to the objectives, there are four aspects that are relevant(Lawson, 1974). These includes:

1. The dimensional character of attending behaviour and to evoke it during learning from instruction.
2. The degree of specificity for stating instructional outcomes.
3. Placement or position effect of objectives during instruction.
4. Discussion of investigations concerned with an incidental or unspecified learning criterion.

Conclusion:

The instructional and behavioural objectives are very necessary for teaching of science, they form the back bone of the learning and teaching. From the studies of the Popham, 1969, Hastings, 1972 etc. it has been proved that the students those who were provided with the instructional and behavioural objectives had better performance in many cases. The students had a clear idea of what to study, why to study, from whom to study and from where to study. Thus, it becomes necessary to provide the objective at the beginning of the chapter.

The objective should not be just some random words arranged in the form of sentence, rather the objective goal should be operational and should echo real time life experiences of the children as said by Bobbit in his book "How to Make a Curriculum" published in the year 1924. The objective should be "precisely defined" as it is most useful for choosing content, for advising learning activities, for influencing a type of instructional technique to follow (TYLER, 1950) so the objectives should not be vague in its approach if the educator expects a particular set or level of activity the instructional or the behavioural objectives should be so adjusted that the student clearly understands what the educator wants form. The students can then perform according to the asked instructions and gain what is being thought effectively.

The studies of Popham, 1969 suggests that the behavioural objectives should be such that it promotes instructional decision making process. Thus the objectives should be such that the student are able to differentiate between the "required" and "not required" thus enabling them to work in more focused way. This approach saves time as well an resources as pointed out by the studies of Mager & Clark, 1963 where the engineering graduates completed their studies that was scheduled for 6 months in 7 weeks, thus saving time and also being more effective than the ones who completed the course in the regular amount of time, that was months.

The behavioural objective should be specific, measurable, attainable, and realistic and time bound. Thefollowing recommendations are made with respect to the instructional and behavioural objectives.

1. Identification of terminal behaviour by name
2. Desirable behaviour and important conditions should be clearly defined
3. Criteria of performance acceptability should be clearly specified by describing the level of performance that is to be considered as acceptable.

Apart from these there are good practices of writing the behavioural objectives, which includes the following:

1. Each behavioural objective should begin with a verb as the selected verb indicates the selected behaviour.
2. Objective should be stated in terms of learner performance. The objective thus stated has to be observable and measurable.
3. Each objective should have only one learning outcome.

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A Study on Digital Marketing Strategy with special reference to Nykaa

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ABSTRACT

The research paper explains the launch of the largest online selling portal of cosmetics, fashion and wellness products by an investment banker turned entrepreneur, Falguni Nayar in 2012. The research paper explains about digital marketing strategy and role played by digital marketing techniques in achieving business goals and objectives. The research paper is prepared using the secondary data from various books, journals and websites. With the change in the trend the business organisations prefer digital marketing strategies over the traditional marketing strategies in order to achieve their marketing goals. The research paper explains the digital marketing strategies adopted by Nykaa in order to acquire Indian Cosmetic Market and the effectiveness of the digital marketing strategies implemented. The research paper concludes that with the technological advancement more and more consumers prefer online shopping medium over the offline shopping medium and has thus resulted in the acquisition of significant portion by Nykaa in the Indian Cosmetic Market. The implementation of efficient digital marketing strategies(social media marketing, youtube marketing, content marketing) has resulted in the success of the brand Nykaa.

Keywords: Nykaa, Indian Cosmetic Market, Digital Marketing Strategies of Nykaa

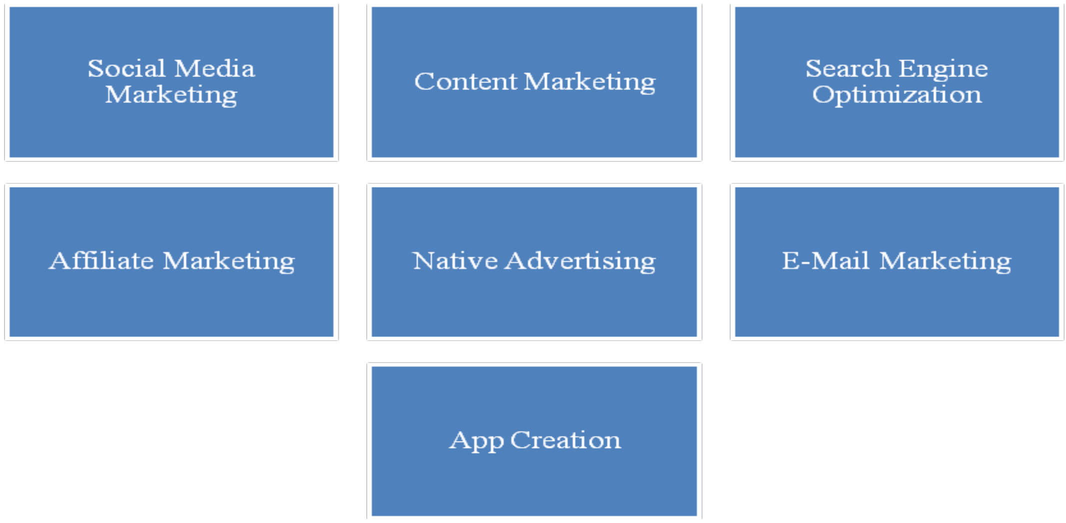
INTRODUCTION

Digital Marketing Strategy

The term 'Digital Marketing' was coined in the year 1990 with the introduction of concept of personal computer. A Digital Marketing Strategy is understood as a marketing strategy adopted by a business organization to attain its certain pre-determined business objectives through online medium available. In other words, digital marketing strategy is a strategy adopted by business organization to promote its products and services through the use of internet like social media platforms, mails to potential customers, search engine optimization. It is often referred as 'online marketing', 'web marketing' and 'internet marketing'.

The first digital advertisement was launched in 1994 by AT&T company titled as "You Will". It was viewed by 44% of the population coming across it.

Following are the most common digital marketing techniques used by the business organisations:



1. **Social Media Marketing**helps promote the brand, its products and services through social media platforms like facebook, instagram, youtube etc. to acquire maximum market share by retaining and attracting potential customers.
2. **Content Marketing**is creation of content done by the business organisations with the aim to increase brand awareness among the population. This is done in the form of blog posts, e-magazines, digital brochures etc.
3. **Search Engine Optimization** is a process through which the rank of showing the web page in the results is improved by raising its number i.e. showing the url of the webpage in initial number of search engine.
4. **Affiliate Marketing** is done by the organisations with the help of consumers who not only consume their products and services but also post their videos promoting using the product or sharing their feedback about it and they get commission for the same. Sponsored partnership posts can be viewed on instagram and youtube channel.
5. **Native Marketing**is done with the help of advertisements appearing along the non-paid content on the webpage. Native marketing includes facebook advertisements, youtube advertisements.
6. **E-Mail Marketing**is done by mailing the existing and potential customers about the information about the products and services, discounts and offers, events with an objective to increase brand awareness and acquire the market share.
7. **App Creation**helps organisations in increasing their sales and revenue as it ensures that the customers will purchase the products offered as there is a direct channel of communication between the organization and the customers.

OBJECTIVES

1. To study about Digital Marketing Strategy.
2. To study about Nykaa.
3. To study about digital marketing strategies implemented by Nykaa to acquire Indian Cosmetic Market.

RESEARCH METHODOLOGY

Research is termed as a systematic process of finding solutions to business problems. Research is termed as an organized method involving of enunciating the problem, formulation of a hypothesis, collection and evaluating the facts and observing conclusions either in the form of solutions towards the concerned problem or in certain generalisations for some theoretical formulation.

The research paper has been prepared with the help of secondary data collected from various books, journals, news articles.

NYKAA

The word "Nykaa" has been derived from the Sanskrit word "Nayakaa" which describes the one in spotlight.

Nykaa is an Indian multi-brand online selling portal dealing in cosmetics and wellness products founded by an investment banker turned entreprenuer, Falguni Nayar in 2012. Its headquarters is located in Mumbai, India. Following are the brands owned by Nyaa:

Cosmetic Products

- Nykaa Cosmetics
- Nykaa Naturals
- Kay Beauty

Fashion Products

- Nykd
- 20 Dresses
- RSVP
- Mondano
- Likha
- Pipa Bella

Nykaa in Indian Cosmetic Market

According to a report published by Market Research and Business Intelligence Company EMR, India's beauty and personal care industry was valued at INR 54,558 crores in 2020. The market is further estimated to grow at a CAGR of 11% in the period of 2022-2027.

Initially Nykaa was launched as an online selling portal of beauty and personal care products but gradually opened its offline stores throughout the country with an objective to acquire maximum market share. Currently, Nykaa operates 84 offline retail stores across the 40 cities in the country.

Nykaa is considered as the market leader for the online segment of beauty and personal care products. It acquires 35% market share for beauty and personal care product segment in the Indian Cosmetic Market. It has more than 5 million active monthly customers.

Timeline of Nykaa

2012: Falguni Nayar founded Nykaa

2014: Nykaa received INR 20 crores from private investors

2015: Nykaa received INR 60 crores from TVS Capital.

Nykaa opened its first offline retail store at Indira Gandhi International Airport.

2016: Nykaa received INR 104.3 crores from Max limited.

2017: Nykaa introduced in-house beauty products

2020: Nykaa Man was launched.

Nykaa expanded into fashion products. Nykaa Design Studio was launched which was later renamed as Nykaa Fashion. Nykaa Fashion launched its first store in Delhi.

Nykaa Pro was launched.

2021: Nykaa opened its Initial Public Offer.

MARKETING STRATEGIES OF NYKAA

American Marketing Association has defined Marketing as an activity, set of institutions, process for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners and society at large.

Dr. Philip Kotler has defined Marketing as the science and art of exploring, creating and delivering value to satisfy the needs of a target market at a profit. Marketing identifies unfulfilled needs and desires. It defines, measures and quantifies the size of the identified market and the profit potential. It pinpoints the segment the company is skilled of serving best and it strategies and promotes the appropriate products and services.

Marketing strategy is understood as the comprehensive plan formulated in order to achieve marketing objectives decided by the business organization i.e. a marketing strategy is a blueprint used by the managers to achieve marketing objectives of the business organization by utilizing the available resources in the most effective and efficient manner.

Nykaa follows the Omni channel marketing strategy in order to achieve its marketing objectives. A business organization uses **Omni channel marketing strategy** to interact with their existing and potential customers at right time and right message with the help of several physical and digital channels. A business organization uses omni channel marketing strategy with an objective to make its products and services easily accessible to its existing and potential customers through offline and online channels.

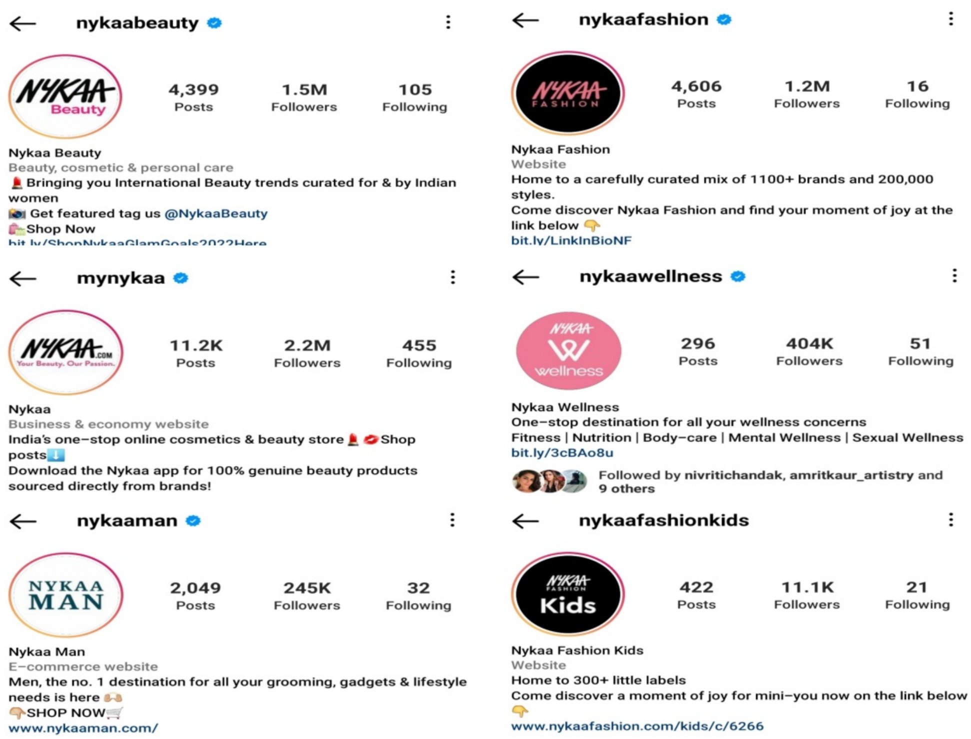
Digital Marketing strategy of Nykaa is comprised of the following elements:

SOCIAL MEDIA MARKETING	YOUTUBE MARKETING	CONTENT MARKETING

1. **Social Media Marketing:**

   Nykaa has used several social media platforms to reach out to its existing and potential customers by influential marketing. Nykaa has several accounts on instagram with different names providing different services:

   a. **My Nykaa**promoting its in-house cosmetic products;
   b. **Nykaa Beauty** promoting its e-commerce platform;
   c. **Nykaa Fashion** promoting its e-commerce apparel store;
   d. **Nykaa Fashion Kids** promoting e-commerce apparel store for kids;
   e. **Nykaa Pro** promoting Nykaa by providing beauty and make-up trends and tutorials;
   f. **Nykaa Wellness** promoting fitness, nutrition and wellness products;
   g. **Nykaa Man** promoting grooming and lifestyle needs of man.



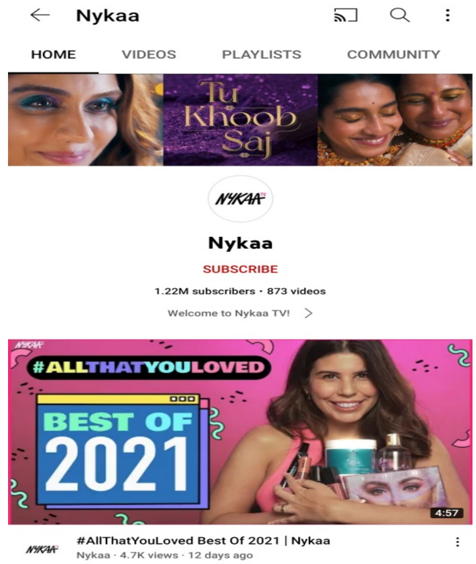
2. **Youtube Marketing:**

   Nykaa has used Youtube online platform for promoting its products by informing its existing and potential customers regarding beauty and make-up trends and tutorials. The Youtube account of Nykaa provides videos promoting

   a. sale campaigns;
   b. festive make-up tutorials;
   c. bridal make-up tutorials;

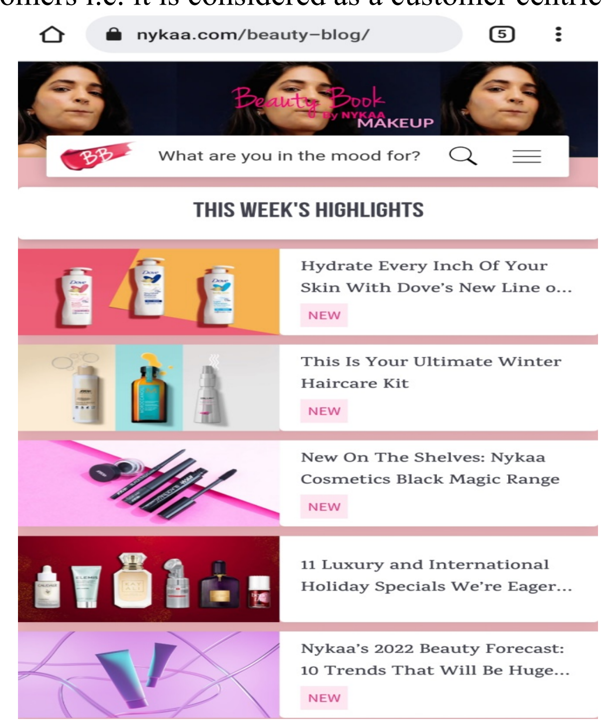
d. skincare and haircare during different seasons;
e. dermatologist advise;
f. do it yourself beauty tutorials;
g. celebrity beauty guides.

Nykaa also promotes its products through advertisements on Youtube online platform.



3. **<u>Content Marketing:</u>**

Nykaa has been promoting its products with the help of its own blog titled as "**Nykaa Beauty Book**". Bloggers are encouraged to post the content promoting Nykaa's products and providing their review and feedback regarding Nykaa's products and services. The content is posted on the blog while considering the likes and needs of the brand's existing and potential customers i.e. it is considered as a customer centric approach.



CONCLUSION

It has been concluded that the incorporation of internet in daily life has motivated business organisations to shift from traditional marketing strategies to digital marketing strategies. The year 2013 has witnessed an unbelievable hype in digital marketing worldwide. It has been concluded that the Nykaa has successfully evolved as a market leader in the online segment of beauty and personal care products in the Indian Cosmetic Market. Nykaa has acquired 35% market share in the timeframe of 10 years from its incorporation. The success story of Nykaa would not have turned into a reality without its effective and efficient marketing strategies. The efficient implementation of digital marketing strategies in the form of social media marketing, youtube marketing, content marketing has resulted in the success story of Nykaa.

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A COMPARATIVE STUDY OF FINANCIAL PERFORMANCE ANALYSIS OF SELECTED IT COMPANIES

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ABSTRACT:

IT sector plays a vital role in strengthening the Indian economy. In order to compare and set benchmark, a financial statement analysis should be made of all companies. The objective of the present paper is to measure the financial and accounting performances of leading Indian IT companies.Since last two decade Indian IT sector plays a tremendous role for the development of India. Financial Performance Analysis provide means of determining capability, stability and profitability of companies on the basis of financial statements. The present paper examine the financial position and performance of selected Indian IT for a time period of 10 years (2011 to 2020) companies and establish a linear relationship between liquidity, leverage, efficiency and profitability. In this, an attempt is made to do Financial Analysis with the help of various accounting ratios and statistical tools like shows differences in profitability of selected IT companies.From the analysis it was found that the performance of Wipro is most satisfactory in terms of Gross Profit and Net Profit Ratio. If we take Return on Capital Invested again HCL is best performer followed by Redigton, Infosys & Wipro. In case of Return on Equity the performance of HCL is ranked first followed by HCL, Wipro, Infosys. If we consider current ratio it can be said on the basis of analysis that Infosys has most liquidity followed by Wipro, HCL & Infosys.

KEY WORDS: IT Companies, Financial Analysis, Liquidity & Profitability Analysis, Financial Ratios.

INTRODUCTION :

The Information Technology (IT) sector has been playing a vital role in strengthening the Indian economy. Its contribution was to India's GDP . In order to compare and set benchmark, a financial statement analysis should be made of all companies.Financial Analysis is a tool to find out current and future position of companies on the basis of historical data gathered from annual reports. Financial performance analysis involves analysing liquidity position, solvency position and profitability position in terms of financial ratios like current ratio, capital structure ratio, return on equity, return on capital employed, gross profit ratio and operating profit ratio. A significant role has been played by IT industry in giving India a global position not only this it has positive influence over the lives of people by contributing directly and indirectly towards diversified business services, world class technology, employability and standard of living. The Indian IT/ ITES industry is divided into four major sectors i.e. for IT services, IT enabled services/ BPM (Business Process Management), Software & Engineering as well as R & D services and Hardware Products A financial statement is a collection of data organized according to logical and consistent accounting procedures. Its purpose is to convey an understanding of some financial aspects of a business firm. Financial analysis (also referred to as financial statement analysis or accounting analysis) refers to an assessment of the viability, stability and profitability of a business, sub-business or project. The present paper attempts to measure the financial and accounting performances of leading Indian IT companies for the period 2011-2020. The paper is structured as follows: it presents a brief review of the literature dealing with the accounting and financial performance of the IT sector, followed by a description of the objectives, data and methodology. Subsequently, it discusses the results, and finally, offers the conclusion.

SELECTED IT COMPANIES DETAILS:

1. **Infosys Limited,**
   Infosys limited is an Indian multinational corporation that provides business consulting, information technology and outsourcing services. Infosys (formerly known as Infosys Technologies Private Limited) is an Indian multinational corporation founded in 1981. It was the third largest Indian IT services company in terms of revenue in 2014, and India's fifth largest publicly traded company. Infosys has global presence with more than 160,000 employees and generated revenue of $8.25. It is headquartered in Karnataka, India. Infosys is dealing with various kind of services such as Aikido: Next-Generation Services, Ki: Knowledge-based management and evolution of landscapes, Do: Design thinking and design-led initiatives, Ai: Platforms and platform as a service, business services, business applications, business intelligence, Digital Infosys Consulting, Oracle, SAP, technology services, application management, etc.
2. **Wipro Limited**
   Wipro Limited (formerly known as Western India Products Limited) is a multinational IT consulting company founded in 1945. It is India's largest publicly traded company and holds the seventh position among world's largest IT services firms. The company is equipped with 147,452 employees to serve clients in more than 175 cities across six continents. With Wipro Consumer Care and Lighting (WCCLG), it has also ventured into FMCG market and is rapidly increasing its presence in the market. Wipro Infrastructure Engineering (WIN) is the largest independent hydraulic cylinder manufacturer in the world. It is headquartered are in Karnataka, India. Wipro is dealing with various kind of products and services such as analytics applications, business process, cloud, consulting, digital, eco-energy, information management, infrastructure services, Internet of things, managed services, mobility, open source, and product engineering
3. **HCL Technologies Limited**
   This company (IT) service and consulting company headquartered in Noida, Uttar Pradesh. It is a subsidiary of HCL Enterprise. Originally a research and development division of HCL, it emerged as an independent company in 1991 when HCL entered into the software services business. The company has offices in 44 countries including the United Kingdom, the United States, France, and Germany with a worldwide network of R&D, "innovation labs" and "delivery centers", and 147,123 employees and its customers include 250 of the Fortune 500 and 650 of the Global 2000 companies.It operates across sectors including aerospace and defense, automotive, banking, capital markets, chemical and process industries, energy and utilities, healthcare.
4. **Tech Mahindra**:
   Tech Mahindra Limited is an Indian multinational information technology company and a part of the Mahindra Group conglomerate. It was ranked fifth among India's software services firms and 111th in Fortune India 500 list, 2012. It is equipped with 92,729 employees across 51 countries. It is headquartered in Maharashtra, India. They are dealing with various products and services like IT, business consulting, business process outsourcing, application development and management, and network services.

REVIEW OF LITERATURE :

1. **Maisuria and Allad (2016)** in their research paper titled "Profitability Ratio Analysis of Selected Indian IT companies" from 2010-11 to 2014-15 revealed that there was difference in the profitability of the companies. But financial performance of Oracle Fin. Services was satisfactory in case of Net Profit Ratio and Earning Per Share, but its Net Worth Ratio and Return on Capital Employed are not satisfactory. This research paper concluded that Tata Consultancy Services was the highest performing company and Tech Mahindra was lowest performer.
2. **Shenbagam&Kannappan (2015)** in his research paper titled " A study on financial position and performance analysis with special reference to Tata Consultancy Services" analysed the financial ratio in term of profitability and asset position found that there was high profitability and absolute liquidity ratio year by year from 2011 to 2015. The return on net worth of the company also showed steady progress.The technique used in study were ANOVA and cofficient of correlation & regression
3. .**Daniel (2013)** Analysed performance by using various activity and financial ratios whether the organization keeping static growth and found a sound situation in all the area or not. On the basis of this company suggested some corrective measures to reduce the expenses, consequently it will be able to increase the profitability of company.
4. **Puttana k.(2014)** Analysed "Performance analysis of Information Technology sector in India". The objective of this Paper was to analysed the earnings before interest and taxes and earnings per share of ten Bombay stock exchange companies in IT sector. It performed a comparative study of EBIT-EPS analysis return on investment. The study revealed that all IT companies have different patterns of earnings and debt funding.
5. **Jeevan JayantNagarkar (2015)** in his study on financial performance analysis of India banks, divides the period of 10 years from 2002 to 2013 on the basis of growth rate of banks, the first five years has high growth rate followed with slogging rate. Slow down in the growth of credit, improper check of credit appraisal process, granting advances from borrowing are few reason for slow growth rate, however large banks are not affected much due to their virtue. Thus government‟s decision of merging small banks is justified in the study

OBJECTIVE OF STUDY :

1. To compare the financial performance position based on financial ratios of selected IT companies.
2. To compare liquidity, profitability and efficiency of selected IT companies.
3. To compare the leverage position of selected IT Companies.

RESEARCH METHODOLOGY.

1. Selection of sample :IT companies - Infosys Limited, Wipro limited, HCL Technologies Limited, Tech Mahindra
2. Duration of The Study: Financial Year – 2011 -2020 (10 year)
3. Source of Data: The study is based on secondary data. Data of selected banks has been collected from their annual reports of Selected Public Sector Bank with the help of internet.
4. Statistical Tool Used : ANOVA, Ratio Analysis technique which include Gross profit,net profit ,Return on investment, Current Ratio, capital structure ratio is used to find out profitability and liquidity position of selected IT companies is also used as statistical tool

HYPOTHESIS OF THE STUDY

HO : There is no significance difference is gross profit ratio, net profit ratio, asset turnover ratio , current ratio, quick ratio of the selected IT companies during the study period.

ANALYSIS & INTERPRETATION :

The data is collected for the four IT Companies (Infosys limited, wipro, HCL, Tech Mahindra) for the periods of 10 years (2011 to 2020)

1. Profitability Analysis:- It is used to denote whether concern is profitable or not. It study whether company is able to meet its shareholders expectation with regards to return on their investment. It is mainly studied by using important ratios such as (a) Gross Profit Ratio & (b) Net Profit Ratio.(c) Asset turnover ratio
2. Liquidity Analysis:- It is used to denote company's ability to pay its day to day expenses or to meet its short term obligations usually upto one year. In order to study liquidity position important ratios used are (i) Current ratio which is computed on the basis of current assets, liquid assety and current liabilitie

GROSS PROFIT RATIO

COMPANIES/YEAR	INFOSYS	HCL	WIPRO	TECH MAHINDRA
2011	42.13	35.38	31.32	28.56
2012	41.12	42.53	29.26	26.42
2013	37.40	47.1	30.42	19.18
2014	35.87	35.2	32.16	26.45
2015	38.36	38.30	31.60	19.88
2016	32.35	24.15	26.43	17.77
2017	31.66	24.08	25.14	17.02
2018	31.48	24.64	23.74	19.90
2019	27.88	24.60	24.11	19.77
2020	27.61	25.33	24.64	18.17
MEAN	34.586	32.131	27.882	21.312
Co- Variance	26.69543	75.31568	11.53406	17.42566

Table No. 1 Gross profit of selected IT Companies (In Percentage)

(source : www.moneycontrol.com)

This table shows the Four Selected IT Companies (INFOSYS , HCL,WIPRO,TECH MAHINDRA) gross profit ratio for periods of 2011 to 2020. This ratio indicates the effectiveness of using profit to generated. Generally, higher this ratio is the more effective. In this table shows that the highest was in 2011 (42.13) of Infosys and lowest was in 2020 (27.61). The gross profit ratio was highest was in 2013 (47.1) of HCL and lowest was in 2017 (24.08). The GPR highest was in 2014 (32.16) of WIPRO and lowest was in 2019 (24.11). The GPR highest was in 2011 (28.56) and lowest was in 2017 (17.02)TECH MAHINDRA. The GPR is higher INFOSYS (34.586) as compared to HCL (32.131), WIPRO (27.882), TECH MAHINDRA (21.312) and effectiveness of gross profit ratio Infosys is good.

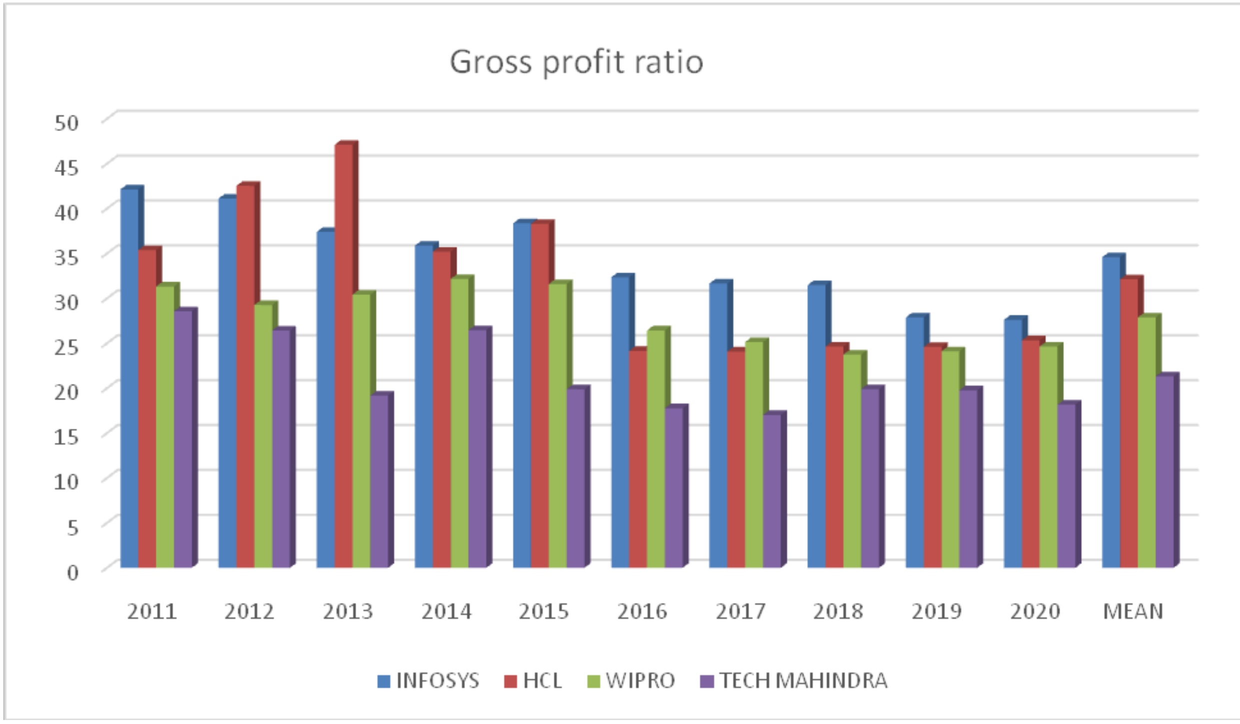

Table No. 2 Oneway ANOVA of Gross Profit

Sources of variance	SS	DF	MS	F	F- critical value
Between group	1013.598448	3	337.8661	10.31882	2.866266
Within group	1178.73745	36	32.74271	-	-
Total	2192.335898	39	-	-	-

(Source : Computed by recearcher)

Above table depict that computed value of F 10.31882 between group, higher than critical value 2.866266 alternative hypotheses has been accepted and null hypothesis has been rejected.

NET PROFIT RATIO

COMPANIES/YEAR	INFOSYS	HCL	WIPRO	TECH MAHINDRA
2011	24.82	24.81	17.07	15.12
2012	24.53	25.24	14.96	11.23
2013	23.24	23.54	17.77	10.57
2014	21.23	22.23	17.94	12.25
2015	23.12	23.14	18.57	12.43
2016	21.60	17.97	17.47	11.41
2017	21.00	18.08	15.36	9.79
2018	22.82	17.22	14.68	12.30

2019	18.63	16.74	15.28	12.53
2020	18.32	15.64	15.97	10.58
MEAN	21.93	20.46	16.50	11.82
Co- Variance	4.93581	13.44505	1.998846	2.213188

Table No. 3 Net profit ratio of selected IT Companies (In Percentage)

(source : www.moneycontrol.com)

This table shows the Four Selected IT Companies (INFOSYS, HCL, WIPRO, TECH MAHINDRA) net profit ratio for periods of 2011 to 2020. This ratio indicates the effective proft and sales. Generally, higher this ratio is the more effective. In this table shows that the highest NPR was in 2011 (24.82) of infosys and lowest was in 2020 (18.32). The NPR was highest was in 2012 (25.24) of HCL and lowest was in 2020 (15.64). The NPR highest was in 2015 (18.57) of WIPRO and lowest was in 2018 (14.68). The NPR highest was in 2011 (15.12) and lowest was in 2017 (9.79) Tech mahindra. The NPR is higher INFOSYS (21.93) as compared to HCL (20.46), WIPRO (16.50), TECH MAHINDRA (11.82) and effectiveness of profit and sales infosys is good.

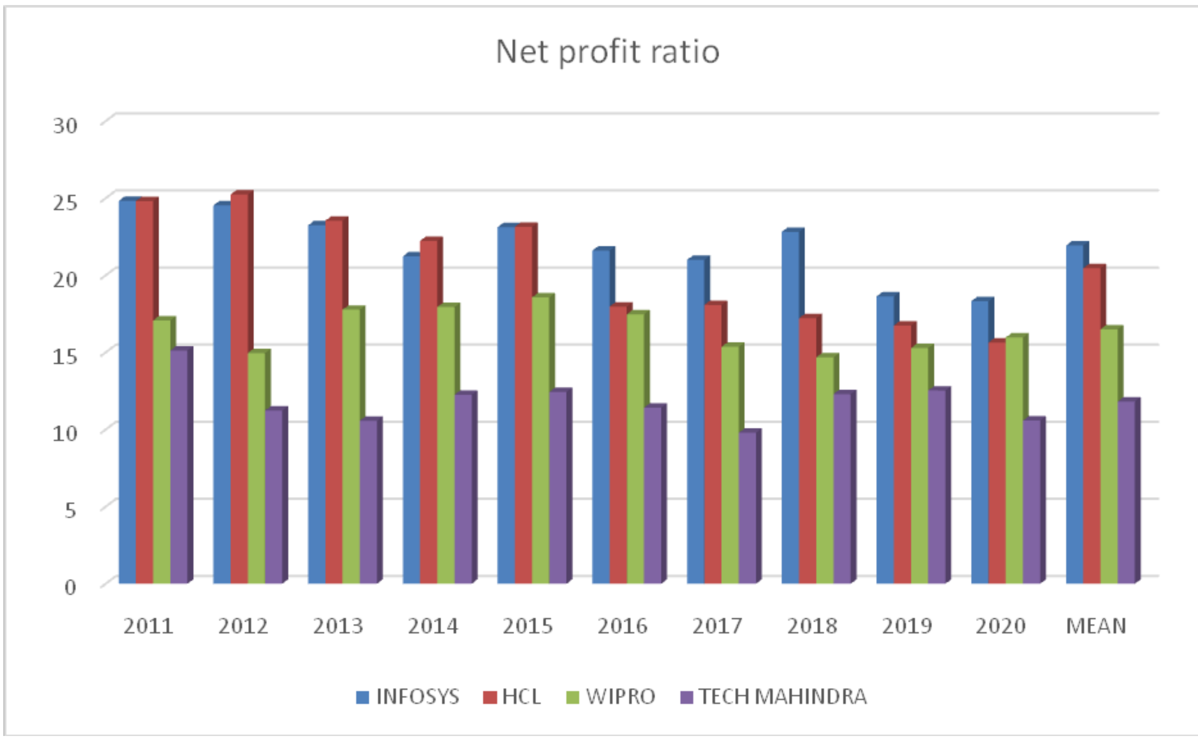

Table No. 4 Oneway ANOVA of Net Profit

Sources of variance	SS	DF	MS	F	F- critical value
Between group	615.0877	3	205.0292	36.29977	2.866266
Within group	203.3361	36	5.648224	-	-
Total	818.4238	39			

(Source : Computed by recearcher)

Above table No.4 depict that computed value of F 36.29977 between group, higher than critical value 2.866266 alternative hypotheses has been accepted and null hypothesis has been rejected

CURRENT RATIO

COMPANIES/YEAR	INFOSYS	HCL	WIPRO	TECH MAHINDRA
2011	6.51	2.31	1.66	1.67
2012	6.34	2.32	1.17	1.41
2013	5.62	2.12	1.41	1.69
2014	4.71	2.62	1.69	2.10
2015	4.15	2.66	2.09	2.48
2016	3.91	2.54	2.30	2.66
2017	3.83	2.33	2.35	2.55
2018	3.55	2.43	2.37	2.29
2019	2.84	2.42	2.67	2.09
2020	2.62	1.62	2.40	2.12
MEAN	4.40	2.33	2.01	2.10
Co- Variance	1.861284	0.089268	0.245988	0.169538

Table No. 5 Current ratio of selected IT Companies (In Percentage)

(source : www.moneycontrol.com)

This table shows the Four Selected IT Companies (INFOSYS,HCL,WIPRO,TECH MAHINDRA) current ratio for periods of 2011 to 2020. This ratio indicates liquidity that measures whether a firm has enough resources to meet its short- term obligations. Generally, higher this ratio is the more effective. In this table shows that the highest CR was in 2011 (6.51) of Infosys and lowest was in 2020 (2.62). The CR was highest was in 2015 (2.66) of HCL and lowest was in 2020 (1.62). The CR highest was in 2019 (2.67) of WIPRO and lowest was in 2012 (1.17). The CR highest was in 2016 (2.66) and lowest was in 2012 (1.41) Tech mahindra. The CR is higher INFOSYS (4.40) as compared to HCL (2.33), WIPRO (2.01), Tech mahindra (2.10) and effectiveness of resources INFOSYS is good.

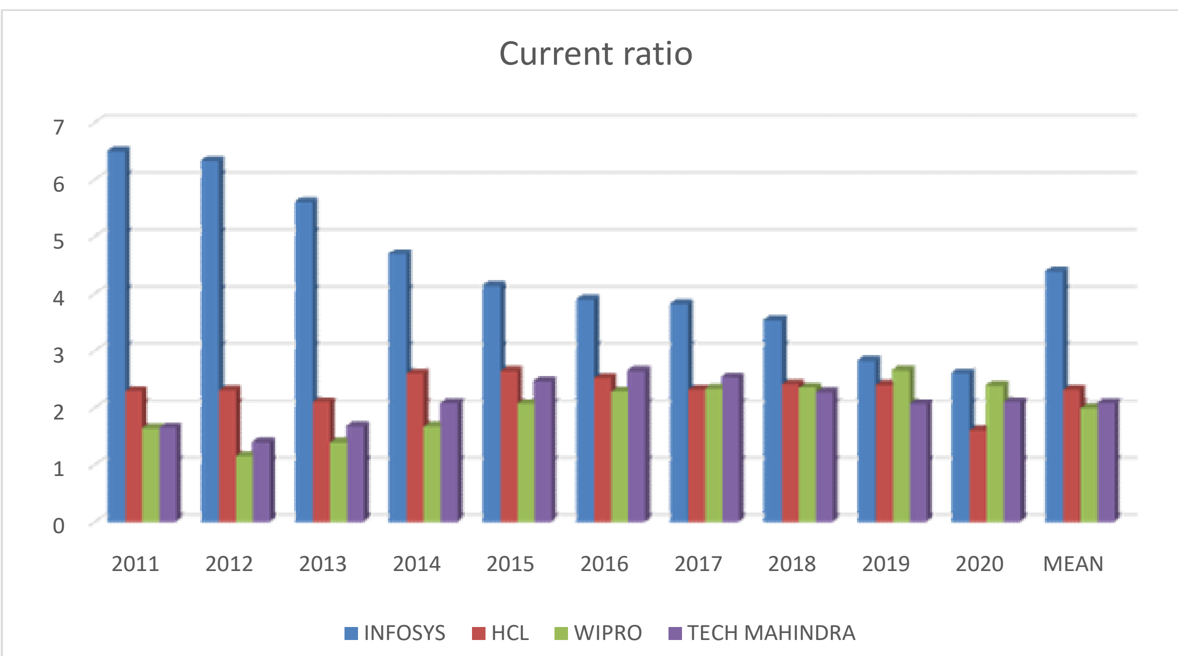

Table No. 6 Oneway ANOVA of Current ratio

Sources of variance	SS	DF	MS	F	F- critical value
Between group	38.75629	3	12.91876	21.83996	2.866266
Within group	21.2947	36	0.591519	-	-
Total	60.05099	39	-	-	-

(Source : Computed by recearcher)

As table no. 6 Above table depict that computed value of F 21.83996 between group, higher than critical value 2.866266 alternative hypotheses has been accepted and null hypothesis has been rejected

ASSET TURNOVER RATIO

COMPANIES/YEAR	INFOSYS	HCL	WIPRO	TECH MAHINDRA
2011	87.97	74.95	77.08	81.66
2012	87.27	81.89	82.08	82.62
2013	85.44	78.43	81.62	82.68
2014	84.11	75.62	84.73	110.55
2015	76.52	68.84	77.15	112.61
2016	74.22	50.52	71.15	101.54
2017	74.21	59.67	70.20	97.60
2018	81.63	67.25	71.98	88.29
2019	92.63	69.44	71.17	89.71
2020	97.53	60.92	77.18	96.38
MEAN	84.15	68.75	76.43	94.36
Co- Variance	59.87811	92.27314	27.04592	128.3685

Table No. 9 Asset turnover ratio of selected IT Companies (In Percentage)

(source : www.moneycontrol.com)

This table shows the Four Selected IT Companies (INFOSYS,HCL,WIPRO,TECH MAHINDRA) Assets turnover ratio for periods of 2011 to 2020. This ratio The asset turnover ratio measures the efficiency of a company's assets to generate revenue or sales. It compares the dollar amount of sales or revenues to its total assets. The asset turnover ratio calculates the net sales as a percentage of its total asset indicates the effectiveness of using assets to generated revenues. Generally, higher this ratio is the more effective. In this table shows that the highest assets turnover ratio was in 2020 (97.53) of INFOSYS and lowest was in 2016 (74.22). The Assets turnover ratio was highest in 2012 (81.89) of HCL and lowest was in 2016 (50.16). The Assets turnover ratio highest was in 2014 (84.73) of WIPRO and lowest was in 2017 (70.20). The Assets turnover ratio highest was in 2015 (112.61) and lowest was in 2011 (81.66) Tech Mahindra. The aseets turnover ratio is higher tech Mahindra (94.36) as compared to

INFOSYS (68.75), HCL (68.75), WIPRO (76.43) and effectiveness of using assets to generated revenues TECH MAHINDRA is good.

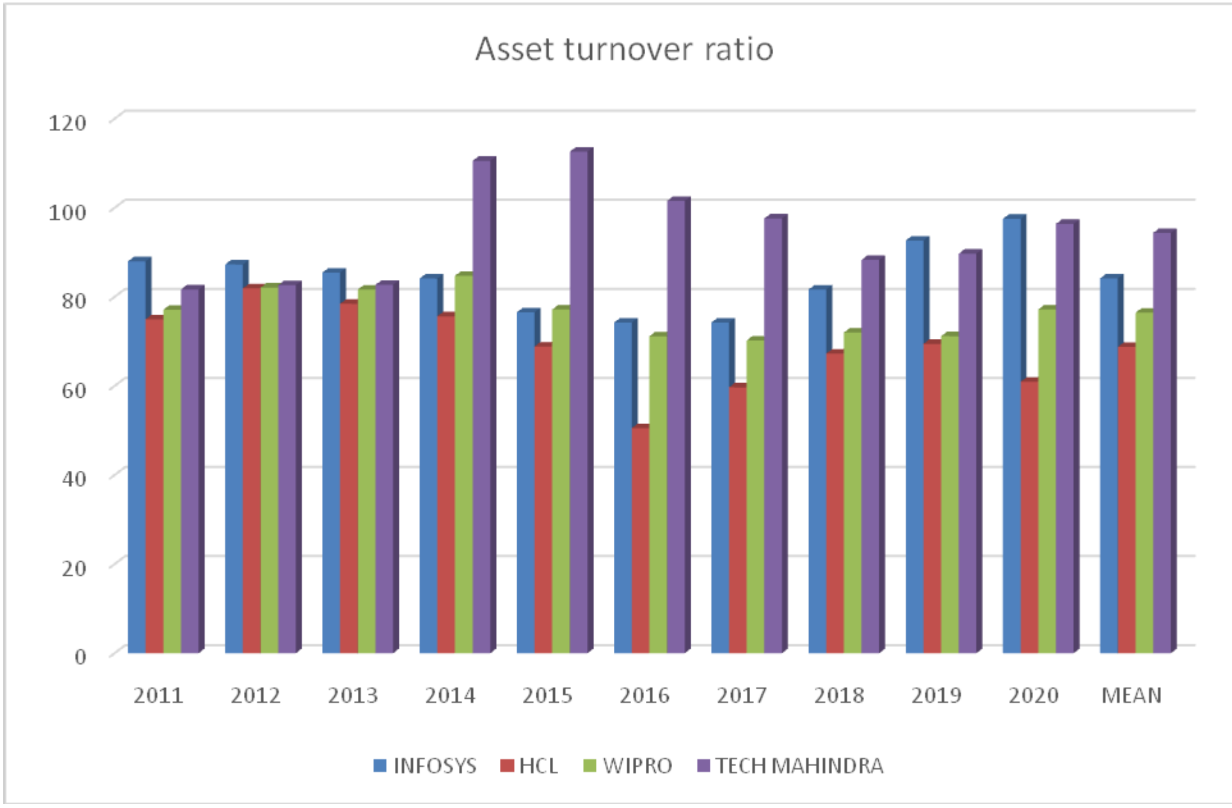

Table No. 10 Oneway ANOVA of Asset turnover ratio

Sources of variance	SS	DF	MS	F	F- critical value
Between group	3593.047	3	1197.682	15.57628	2.866266
Within group	2768.091	36	76.89141	-	-
Total	6361.138	39	-	-	-

(Source : Computed by recearcher)

Above table depict that computed value of F 15.57628 between group, higher than critical value 2.866266 alternative hypotheses has been accepted and null hypothesis has been rejected

FINDINGS :

1. The GPR is higher INFOSYS (34.586) as compared to HCL (32.131), WIPRO (27.882), TECH MAHINDRA (21.312) and effectiveness of gross profit ratio Infosys is good. This ratio indicates the effectiveness of using profit to generated.
2. The NPR is higher INFOSYS (21.93) as compared to HCL (20.46), WIPRO (16.50), TECH MAHINDRA (11.82) and effectiveness of profit and sales infosys is good.

3. The CR is higher INFOSYS (4.40) as compared to HCL (2.33), WIPRO (2.01), Tech mahindra (2.10) and effectiveness of resources INFOSYS is good. This ratio indicates liquidity that measures whether a firm has enough resources to meet its short- term obligations.
4. The QR is higher INFOSYS (2.44) as compared to tech mahindra (2.08), HCL (1.93), WIPRO (2.02) and effectiveness of companys short term liquidity position INFOSYS is better than others companies.
5. The aseets turnover ratio is higher tech Mahindra (94.36) as compared to INFOSYS (68.75), HCL (68.75), WIPRO (76.43) and effectiveness of using assets to generated revenues TECH MAHINDRA is good.

CONCLUSION :

Information technology industry is one of the successful and progression industries inindia. Investors are also willing to invest in shares of the company with the view of getting high return through dividend and capital appreciation. Hence the study has been made to analyse perfprmance top four information technology companies in india. In this study Selected the four it companies (INFOSYS, HCL, WIPRO, TECH MAHINDRA) for the period of (2011 to 2020) overall conclude this ratio INFOSYS, TECH MAHINDRA are good performance of assets and generated revenues.the study find out net profit ratio and gross profit ratio INFOSYS are better than HCL, WIPRO and TECH MAHINDRA. Profitability in term of assets turnover ratio in case good of TECH MAHINDRA and protability performance in thois aspects was not good in case of HCL and WIPRO. Overall profitability performance in all aspects is good in case of INFOSYS LTD.

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CSR issues in modern banking system- A Study on ICICI Bank

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ABSTRACT:

Today's banking industry is a far cry from the traditional brick-and-mortar institutions of the past. Today, customers can do everything from simple transactions like making a deposit or withdrawing cash to complex financial decisions such as buying a home or starting a business entirely online. While this has made banking more convenient for customers than ever before, it has also introduced a host of new corporate social responsibility (CSR) issues for banks. Social responsibility has always been a topic of interest for the general public. Most people want to feel like they are making a difference in their communities, and the best way to do that is through social responsibility. It can come in many forms, such as volunteering, donating, or starting a business that gives back. But what if the entity that has the most power to help people is a bank?The banking sector has a broad reach with a variety of products and services.So,in our research paper we study the CSR aspects of ICICI Bank. The sector is often thought of as a conservative, steady-hand banking sector, but there is great potential in it for CSR, especially when it comes to providing financial services to those most in need. ICICI bank CSR shows a deep commitment to skill building for the larger purpose of Nation Building. Ranked the 'Best Company to Work For' fourth year in a row(by Business Today magazine), this bank is a large provider of financial services and products. A large- shape focus on inclusive growth through strategic skill development programmes at the urban and rural level sums up corporate social responsibility at ICICI Bank. The Bank's CSR activities are mainly focused in the areas of education, health, skill development and sustainable livelihoods, environmental projects, rural development, and any other activities that are conforming to Schedule VII of the Companies Act, 2013. The CSR Policy was initially approved by the CSR Committee in July 2014. The CSR Policy was last revised in April 2021.

Key Words: *Corporate Social Responsibility, ICICI Bank, Financial Services, BankingSector.*

Introduction

Corporate Social Responsibility (CSR) is the commitment of companies to provide resources and support activities focused on enhancing economic and social development. It is the effort made by companies to improve the living conditions of the local area in which they operate and the society at large. The activities taken up as part of corporate social responsibility reflect the intent to create a positive impact on society without seeking any commensurate monetary benefits.

CSR has been a long-standing commitment at ICICI Bank and the ICICI Group and forms an integral part of our activities. The Bank's contribution to social sector development includes several pioneering interventions and is implemented through the involvement of stakeholders within the bank, the Group, and the broader community. The Bank established the ICICI Foundation for inclusive Growth (ICICI Foundation) in 2008 with a view to significantly expand the ICICI Group's activities in the area of CSR. Over the last few years ICICI Foundation has undertaken significant initiatives in specific areas and has built capabilities for direct project implementation as opposed to extending financial support to other organisations.

Literature Review

Trotta et al. (2012) in their research found CSR as an important driver of reputation of any institution and also creates economic value over time. Holder-Webb et al. (2009) argued that CSR can be considered as a source to have a competitive advantage and an increase in the company's credibility with stakeholders and also to build a long-term reputation. According to Gautam and Singh (2010), the literature available on CSR indicates that the CSR does not affect the company's goodwill and reputation, but also has an adverse effect on the financial performance.

According to Tsang (1998), CSR has been a major area for research for many years. Bronn and Vrioni (2001) stated that CSR as a notion developed principally in 1960 with the idea that different organizations have responsibilities beyond their legal commitment. Turker (2009) argued that initially CSR was just a compulsion on firms for social benefits.

According to Abagial McWilliams et al. (2003), even though the exact definition of CSR is not given anywhere but still CSR has many advantages for the banking sector. Attila Turi et al. (2014) stated that in the present economic conditions, CSR is the most appropriate solution for integrating the moral and ethical principles in the banking industry. Richard Welford et al. (2007) argued that CSR differs from region to region, business to business, company to company and beyond time. According to Burianová and Paulík (2014), the act of executing CSR and moral standards in the banking industry prompts for social duty and ethics which has become an appropriate marketing apparatus to communicate with the stakeholders. State Bank of India initiated the thought of CSR in the early 1973 in the name of Innovative.

Statement of the Problem

"Banking is a vast subject many economic researchers have studied and focusing their attention on various spheres of banking.The studies available on the performance of commercial banks are minimal in number. There are still many unexplored areas that needs to be explored. In this context"CorporateSocial Responsibility issues on ICICI Bank" is selected for the present study."

Objectives of the Study

The literatures in record show that a lot of researches have been done on CSR activities, CSR investment in banking industry but a particular bank's performance with respect to CSR initiatives is not analysed as it is required in the current scenario. So, after identifying this research gap, this study analyzes the status of CSR initiatives of SBI. The main objectives of the study are:

• To collect the information about CSR actions done by ICICI.

• To identify whether the CSR actions are facilitating the society as a whole.

• To categorize the essential part where CSR activities are being carried out by ICICI.

Methodology

The present study is descriptive and exploratory in nature. A well-structured questionnaire was made for the study. There were some specific questions related to CSR investment of the banks. And in order to take answers from the respondents, a five-point Likert scale has been used. Moreover, secondary data has been collected from existing literature, published books, articles, journals, newspapers, magazines, and internet for this research. Annual reports of 5 years of ICICI from 2015-19 has been critically analysed and all the CSR investments have been taken into consideration.

In this study, 84-refered empirical and theoretical researches and articles relevant to CSR in the banking sector were reviewed and analyzed. In other words, we only use the secondary data collected through those articles and researches to analyze and make a literature review of 5 main issues on CSR in banks. By comparing and contrasting prior results, we can summary all addressed issues regarding CSR in banks, suggesting some new concerns in future research.

Meaning of CSR

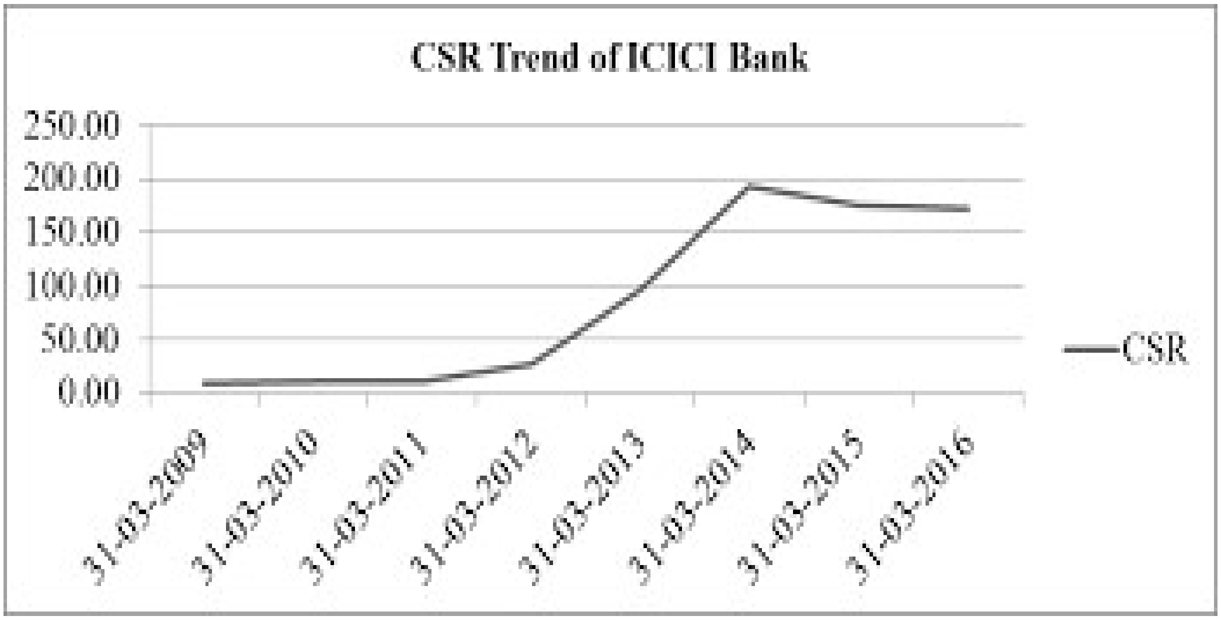
The term "CSR" first officially appeared in the book "Social Responsibilities of the Businessmen" that was written by Bowen (1953). The concept CSR was referred to "the obligations of businessmen to pursue those policies, to make those policies, or to follow those lines of actions that are desirable in terms of the objectives and value of our society."

Total Spending on Corporate Social Responsibility (CSR) as percentage of profit after tax (%): The Bank has spent **1343.5 million** or 2.1% of its average net profits of the last three financial years ending March 31, 2017, March 31, 2018, and March 31 2019 towards CSR activities in fiscal 2020.

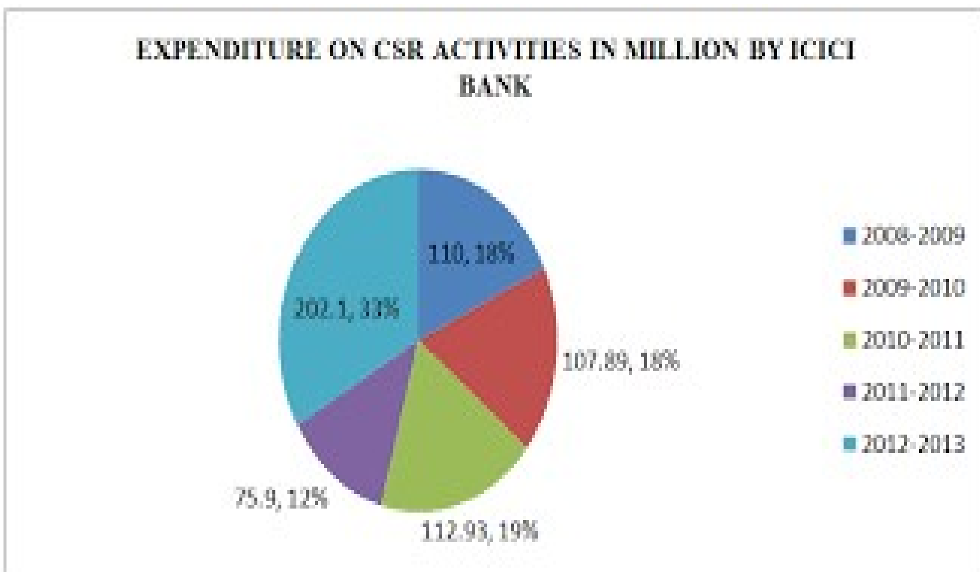
- ✓ **Following Points are included in the CSR according to Schedule VII under section 135 of the Companies Act, 2013:**

CSR Committee and Policy:

Every qualifying company requires spending of at least 2% of its average net profit (Profit before taxes) for the immediately preceding 3 financial years on CSR activities in India. Further, the qualifying company will be required to constitute a committee (CSR Committee) of the Board of Directors (Board) consisting of 3 or more directors. The CSR Committee shall formulate and recommend to the Board, a policy which shall indicate the activities to be undertaken (CSR Policy); recommend the amount of expenditure to be incurred on the activities referred and monitor the CSR Policy of the company. The Board shall take into account the recommendations made by the CSR Committee and approve the CSR Policy of the company.



CSR Expenditure by ICICI



Source- A Roadway to Corporate Social Responsibility- A Study on ICICI Bank

The primary focus areas for the Bank for CSR activities are:

1. **Education**{Schedule VII(ii)} promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects) Education represents a critical area of action to realise India's growth potential as also make it inclusive, by enabling children from all

sections of society to have access to quality basic education that equips them for taking up higher education or job-oriented skill training.

2. **Health care**{Schedule VII (i)} Eradicating hunger, poverty and malnutrition, promoting preventive healthcare and sanitation including contribution to Swachh Bharat Kosha and making available safe drinking water; (iii) Promoting gender equality, empowering women, setting up homes and hostels for women and orphans, setting up old age homes, day care centres and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups; Rural development projects.

3**. Skill development and sustainable livelihoods**

1. {Schedule VII (ii)} promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly, and the differently abled and livelihood enhancement projects.

2. Promoting gender equality, empowering women, setting up homes and hostels for women and orphans, setting up old age homes, day care centres and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups.

3. Rural development projects enabling India's youth to gain skills that can improve employment opportunities is key to realizing the potential of India's demographic dividend and driving inclusive growth.

4. **Environmental projects**{Schedule VII (iv} ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air, and water, including contribution to Clean Ganga Fund set up for rejuvenation of river Ganga.

5. **Rural development through financial inclusion and literacy**

1. Schedule VII (iii}-Promoting gender equality, empowering women, setting up homes and hostels for women and orphans.

2. Setting up old age homes, day care centres and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups (x) Rural development projects.

Barriers for banks to undertake CSR

It is important to recognize that any organization may decide to not undertake CSR programs due to various barriers. The economic, political, knowledgeable, and perceptional barriers which prevent Chinese SMEs from engaging in CSR are summarized jointly (Qi Lai, 2006). Ironically, given prevalence of CSR practices in banks, there has been little attention to build a summary about reasons for conducting CSR programs with respect to bank situations. Thus, we believe there still has other reasons that deserve further research attention.

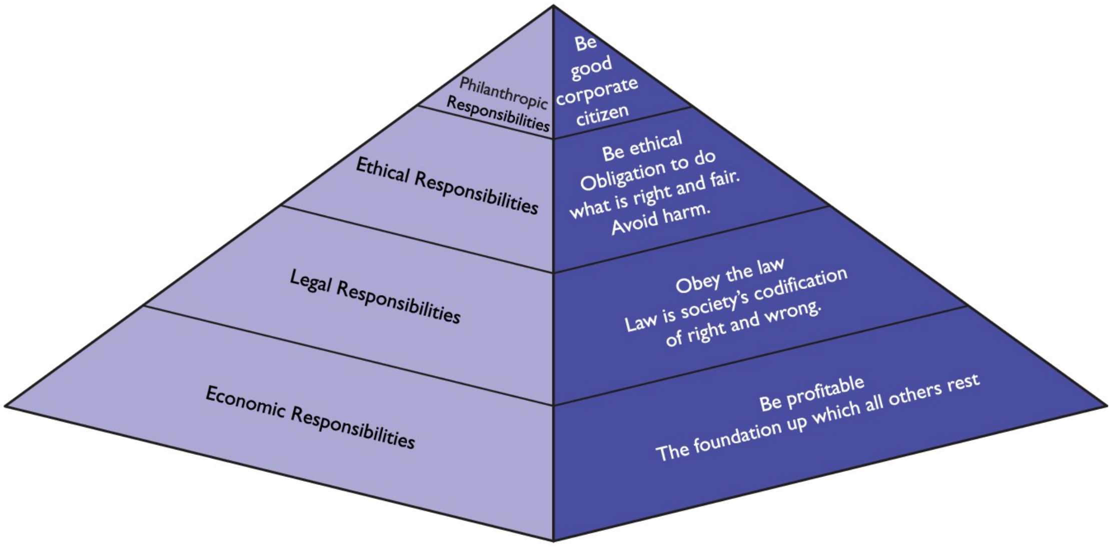
Economic barriers It is often believed that investment in social responsibilities is a financial burden for any banks, in which banks have to pay extra money, time and even energy to conduct a wide range form of CSR programs. Especially, small firms in general may lack resources such as finances, human resources, or time to devote to CSR (Lorraine Sweeney, 2007).

Political barriers In some nations, there is a lack of policy frameworks and incentives needed to adjust bank leader's attitude of CSR and enable banks to perform socially. This practice is because the local government might lack knowledge about CSR in banks and also lack of incentives to impose law regarding CSR implementation in banks. More specifically, it is easier for them to get promoted by short-term economic successes than by long-term environmental and social commitments (Qi Lai, 2006). In future research, it is, therefore, necessary to make a clear different roles and responsibilities of government and banks in the implementation of CSR measures. Besides, while CSR in developed countries become a common place for such a long time, mostly banks in developing countries starts conducting CSR measure later. The possible barrier preventing banks in those countries from improving their social responsibility is the lack of regulatory requirements for social and environmental responsibility. Companies in the USA, Canada, Japan, Germany, UK and Australia practice and disclose more CSR through their websites, annual reports and separate sustainable reports because of strict laws towards sustainable issues

Knowledge and Perception barriers

As mentioned above, the horizons and perceptions of managers or bank leaders are considered driving forces to guide bank's performance in CSR because if those managers have a clear idea about the concept, they do embrace CSR, and they can impose suitable policy for their own banks. Essentially, the concept of CSR and specific components of CSR in banks are still very limited. Besides, there are misconceptions in the sense that CSR is Government's and NGOs incorporation. The reason for this can be the lack of sustainable education among bank's people. Many people are not aware of destructive consequences of not conducting CSR activities and CSR reporting. Thus, future studies analyzing interventions and solution to improve the knowledge and attitude of bank leaders and even bank employees who directly conduct CSR programs may help improve CSR practices in the banking sector.

CSR Models for Banks



Carroll's CSR Pyramid

Figure 1 Pyramid Model of CSR

Data Analysis and ICICI Annual Report

₹ in billion, except percentages	Fiscal 2019	Fiscal 2020	% change
Net interest income and other income	415.27	**497.16**	19.7%
Operating expenses	180.89	**216.14**	19.5%
Core operating profit	220.72	**268.08**	21.5%
Treasury income	13.66	**12.93**	(5.3)%
Operating profit	234.38	**281.01**	19.9%
Provisions & contingencies (excluding tax)	196.61	**140.53**	(28.5)%
Profit before tax	37.77	**140.48**	271.9%
Profit after tax	33.63	**79.31**	135.8%

₹ in billion, except percentages	Fiscal 2019	Fiscal 2020	% change
Consolidated profit before tax and minority interest	74.08	**185.89**	150.9%
Consolidated profit after tax and minority interest	42.54	**95.66**	124.9%

Source- ICICI Bank Annual Report 2020

Impact of CSR on Banks

- The bank‟ attitude towards current problems of society related culture and environment (Persefoni Polychronidou et al., 2013) become more and more recognized by bank clients. As a result, banks are recently motivated by goals other than profit, revenue, and marketshare because this alternative inspiration can be better both for the society and the bank itself.
- There has been significant and interest in the relationship between a firm's CSR initiatives and Corporate Financial Performance (CFP) in recent years. According to Margolis and Walsh, 2003, 122 published studies have been conducted to empirical measures the relationship between CSR and CFP during theperiod 1971 – 2001.
- Positive relationship implies that CSR improves firms‟ value. Researches of Bass et al. (1997); Sarre et al. (2001) and Deckop et al. (2006) indicated that the quality of CSR in banks might go a longway towards reducing the risk associated with financial institutions that lead to improve financial performance.

How to effectively implement CSR program in banks / Lesson from developed country:

More importantly, before proposing any CSR program or CSR strategy, banks can consider following lessons implied from six lessons from the UK Construction Products Industry (Ian Holton et al., 2007).

Lesson 1: Why Is this Strategy use? It is for the needs and interests of all the organizations and stakeholder groups.

Lesson 2: What Is the Purpose of the Strategy? The strategy often aims at setting out a longterm plan for improved economic, environmental, and social performance in the sector. International Journal of Economics, Commerce and Management, United Kingdom Licensed under Creative Common Page 15.

Lesson 3: Have All Impacts Been Considered? This lesson plays a crucial role because underestimation or omission of impacts during the analysis phase is likely to reduce the effectiveness of the strategy.

Lesson 4: Has the Strategy Been Formulated to Meet its Purpose? A clear long-term plan for improved economic, environmental, and social performance must be established in the formulation phase.

Lesson 5: How Will the Strategy Be Implemented? In this issue, the support of businesses and stakeholders is critical to the successful implementation of the CSR program. In order to gain this support, it is necessary to clearly specify how these changes can be achieved, which stakeholders would be involved and what the costs and benefits will be.

Lesson 6: How Will Progress Be Measured and Reported? Targets and indicators need to be specified in order to measure improvement and demonstrate progress to stakeholders. If quantifiable progresses not demonstrated, stakeholders would consider this strategy ineffective, and it will lose their support.

Conclusion

Banking sector is now facing heavy burden of dealing with destructive impacts of the global financial crisis. In addition, the demands for heightened levels of CSR in banks are being pressed worldwide due to increasing severe competitiveness and potential benefits given by CSR. This study does great contribution to developing a framework for a better CSR understanding about CSR research and CSR status in many countries all over the world in 5 main issues. Moreover, the study proves many facts about CSR. Social responsibility does not mean that a company must abandon its primary economic mission, and socially responsible firms cannot be as profitable as other less responsible (L.Zu, 2009). Evidently, many worldwide banks such as ICICI have recently and increasingly adopted CSR as a tool to achieve benefits and become successful in balancing the benefits against the costs of undertaking this tool. In addition, the key barriers for CSR of ICICI that should be addressed in future studies include lack of awareness, lack of the regulatory framework, lack of motivational incentives and lack of combined initiatives from governments. Thus, this study is expected to contribute greatly to encourage CSR adaptability of ICICI Bank and success of CSR implementation in this Bank.

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Factors affecting the dielectric properties of soil at microwave frequencies

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Abstract: In this review paper different factors that as affecting dielectric properties of soil at different microwave frequency have been discussed. There are many factors that affect the dielectric property of soil like frequency, moisture content, temperature, bulk density, texture (percentage of sand, silt and clay) and contamination.The dielectric constant ϵ' and dielectric lossϵ'' of soils decreases with increasing frequency but increased with increasing temperature. There is slow increase in dielectric constant at lower percentage of water content and then it increases sharply at higher water content. The change in dielectric constant of soil before and after diesel oil contamination is small but significant.The a.c. conductivity (σ) and relaxation time (τ) shows a systematic change with increase in moisture content. There is increase in relaxation time due to increases in moisture content. It is found that dielectric constant ϵ' and dielectric lossϵ'' increases with increasing percentage volume of organic and inorganic matter. Dielectric values obtained with organic matter(Vermi compost) are higher than that of inorganic matter.There is positive co-relation of dielectric constant with porosity and strong negative correlation with bulk density.As the pH value increases dielectric constant of soil decrease. Experimentally it is found positive correlation of electrical conductivity of soil with available macronutrients such as nitrogen, phosphorous, potassium, calcium etc.Concentration of different fertilizers and amount of cow manure added in soil also affect dielectric properties, the dielectric constant and dielectric loss increases with increase in fertilizers content.

Keywords : Dielectric constant, Dielectric loss, Fertilizers, Moisture content

Introduction: The study of dielectric properties of soils at microwave frequencies plays an important role because it provides interpretation of various remote sensing data. When an electromagnetic (EM) energy is incident on a dielectric material some part of this energy is reflected, some is transmitted and remaining part is absorbed. All these phenomena are represented in terms of dielectric properties of that material. Dielectric constant is most important parameter in MRS for the study of soil. Complex permittivity has two parts ,real part is called dielectric constant(ϵ') and imaginary part is called dielectric loss factor (ϵ''). Dielectric constant represents the energy storage in a dielectric medium while dielectric loss factor represents dissipation of electromagnetic energy. Dielectric properties of soil are important in the field of agriculture, remote sensing and geophysical exploration.

Properties of soil: Soil is composed of solids, liquids and gases mixed in different proportion. There are 4 major components of soil as solid phase, liquid phase, gaseous phase and soil minerals. Soil has mainly four types of properties as physical properties, chemical properties and electrical, geographical properties. Physical properties of soil are bulk density, particle density, water holding capacity, porosity, welting point, transition moisture and colour etc. Chemical properties are pH, electrical conductivity, organic carbon, Nitrogen, Phosphorus, potassium, copper, Zinc, Mg, Fe, sulfur etc. Geographical properties explain latitude, altitude, longitude and average rainfall (mm). Electrical properties included dielectric constant, dielectric loss, tangent loss, conductivity, relaxation time, emissivity etc. Dielectric properties mainly function of frequency, water saturation, porosity, texture, component geometry and temperature. Different studies predict that dielectric properties of soil are function of its physico-chemical properties[1].

Experimental procedure:

1)Sample preparation: The following sequence of steps were taken for sample preparation:

- **a)** Soil sample first sieved to get fine particles.
- **b)** All the soil samples were then oven dried at 110^{o}C for 24 hours to remove any moisture content.
- **c)** After this process of drying equal amount of oven dried soil samples were taken into consideration for physico –chemical and dielectric properties.

2) Methods of measurement of dielectric constant: Mainly there are 4 different methods for the measurement of dielectric constant of soil at microwave frequency [2].

a) Transmission method

b) Wave guide method

c) Cavity method

d)Free space method

The selection of any method depends on many factors like physical properties of soil, temperature, humidity etc.

Effect of different factors on dielectric properties of soil: Discussion

There are many researchers reported the finding of their studies in dielectric properties of soils from various part of the world at different microwave frequencies. Following factors affectthe soil'sdielectric properties:

Soil Moisture content: The estimation ofdielectric constant is very sensitive to moisture content at microwave frequencies. Experimentally it is observed that there is slow increase in dielectric constant at lower percentage of water content and then it increases sharply at higher water content and becomes constant at certain value of water. The value of dielectric constant decreases with the presence of excessive water due to ionic effect [3].

Frequency of oscillation: Dielectric constant and dielectric loss decreases as frequency goes on increasing because molecules having less time to rotate with increasing frequency and its reduce polarization of molecules. As frequency increases a. c. conductivity also increases [4].

Bulk Density: For a given value of gravimetric moisture constant, increases in the bulk density will increase soil dielectric constant, further dielectric loss increases with increase in bulk density. Dielectric constant has significant negative correlation with wilting point, wilting point indicate the water holding capacity of soil [5]. Experimentally it is found that ∈' and ∈'' increases as bulk density of soil increases. Value of ∈'' increases with bulk density due to increase in rotational inertia and viscosity. In this experiment the emissivity computation, roughness of soil surface has been taken into consideration and results shows that the emissivity increases with increasing roughness of soil surface [6].

Soil colour: It is important physical parameter, which affect the dielectric properties. The soil's colour reflects the chemical composition present in the soil.

Salinity: The presence of soluble salts in soil also has a direct effect on the value of dielectric constant. An increase in salinity increases the dielectric constant, as the salinity moves up conductivity. This effect is higher at frequencies range <3 GHz. Due to this effect, salt affected soils can be detected with RADAR [7].

pH value of soil: . There is negative correlation of electrical conductivity and dielectric constant with pH [8].

Soil texture : Soil texture is defined as percentage of sand, silt and clay present in the soil . Result shows that dielectric constant of dry soil is proportional to sand content, but there is negative correlation between dielectric constant with silt and clay percentage in soil. There is negative significant correlation of dielectric constant wilting point [9].

Concentration of fertilizers: Different studies indicate that the value of dielectric constant (∈'),dielectric loss(∈''), electrical conductivity (σ) and relaxation time (τ) of the soil increase with increasing in fertilizers concentration. Porosity of soil is very remarkable tool to measure moisture content and moisture movement in soil .The research showed that the fertilizers increases more pore space in the soil [10].

Cow manure: Dielectric constant (∈') and dielectric loss(∈'') decreases with increase percentage of volume of cow manure. The presences of cow manure increases the bound water fraction and thus reduce the complex dielectric emissivity in the complete range of moisture[11].

Contamination of soil: It is found that dielectric constant and dielectric loss both increase with the addition of oil, this is because the oil penetrate deep into soil and replace the air in the pore space and block air space. Due to this contamination soil's physical and chemical properties alter and finally its dielectric permittivity change. It is found that after addition of lubricant oil, the amount of change in dielectric constant is very significant[12].

Conclusion: laboratory studies of dielectric properties of soil with varies moisture , temperature, texture, bulk density as well as chemical and physical properties are very important in correlating remotely sensed data with actual field condition [13] . Many researches show that dielectric properties mainly affected by moisture content and frequency of oscillation in microwave region. The knowledge of dielectric properties at microwave frequency region is very important because can be used to predict the soil fertility and health.

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New Education Policy & Quality Universities and Colleges: A New and Forward-Looking Vision for India's Higher Educations

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Abstract

Because education leads to economic and social growth, the country needs a well-defined and long-term education strategy at the school and college levels.To make it successful, various nations use distinct education systems that take into consideration tradition and culture and adopt different stages of their life cycle at the school and college level.The Indian government recently unveiled its new education policy, which was based on the suggestions of an expert group chaired by Dr. Kasturirangan, the former chairman of the Indian Space Research Organization.This was a significant step in improving the country's education system, which was in desperate need of reform.This article compares and contrasts the different policies announced in the higher education system with the present system. The many innovations of NEP 2020, as well as its consequences for the Indian higher education system, are addressed, as well as their benefits.As is widely known, education is a concurrent issue, and the proposal's execution under the new Education Policy 2020 is based on the Center's and State's future guidelines.

Keywords: NEP 2020, Higher Education, Quality Education, Development

Introduction

The Modi 2.0 government approved the New Education Policy 2020 on July 29th. The country had been waiting 34 years for this document to be authorized. Given the numerous obstacles that Covid-19 presents to educational institutions, it remains to be seen how much this new policy will change the country's requirements. The way people are taught and learn has shifted. Online education has replaced offline schooling. New tools and courses have gained popularity, opening up new avenues for inquiry. In the midst of all of this, the new education policy arrives at a time when the global GDP is in decline.

Higher education should facilitate the development of an enlightened, socially conscious, informed, and competent country capable of identifying and implementing effective solutions to its own issues on a societal level. Higher education should contribute to the growth of the national economy by forming the foundation for knowledge production and innovation. More options for individual employment are not the exclusive objective of high-quality higher education. It is the key to a more vibrant, socially involved, cooperative society, as well as a joyful, integrated, cultural, productive, inventive, progressive, and affluent country.

The fragmentation of India's higher education system can be attributed to a number of factors:

- Students are streamed into several disciplines at an early age.
- Due to a lack of access to higher education, particularly in socioeconomically deprived regions, the current gross enrollment ratio (GER) is just 25%.
- Inadequate teacher and institutional liberty to innovate in higher education in order to attract a large number of students.
- Inadequate procedures for academic and institutional leaders' career management and advancement.
- In most universities and colleges, there is a dearth of research and innovation.
- In higher education institutions, there are sub-levels of governance and leadership.
- A nefarious regulatory structure that allows for the growth of fake colleges while restricting the growth of good, creative schools.

Provisions of the Constitution

Part IV of Indian Constitution, Article 45 and Article 39 (f) of Directive Principles of State Policy (DPSP), has a provision for state-funded as well as equitable and accessible education.

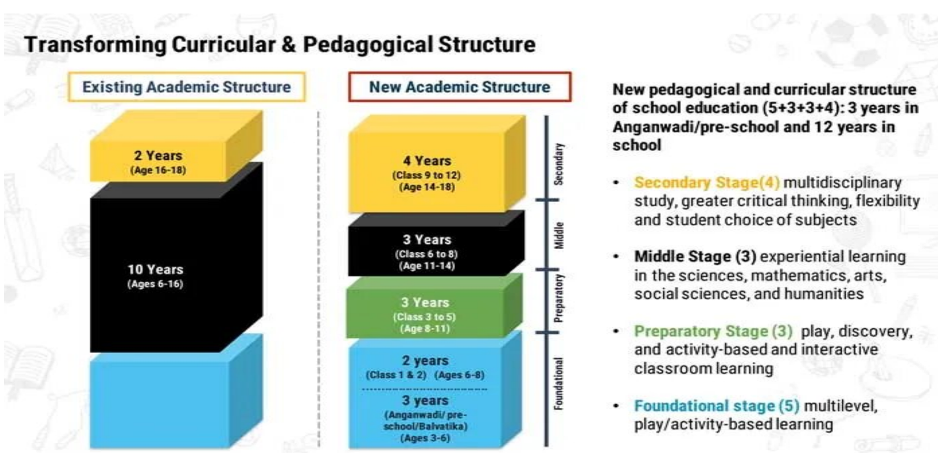
The 42 Amendment to the Constitution in 1976 moved education from the State to the Concurrent List. The central government's education policies set a general direction, which state governments are supposed to follow. However, it is not required; for example, Tamil Nadu does not follow the three-language formula outlined in the first education policy, which was issued in 1968. The 86 Amendment in 2002 made education an enforceable right under Article 21-A.

Related Laws

Right to Education (RTE) Act, 2009 aims to provide primary education to all children aged 6 to 14 years and enforces education as a Fundamental Right. It also mandates 25% reservation for disadvantaged sections of the society where disadvantaged groups.

The Policy's Perspective

The New Education Policy 2020 looks into the education system rooted in Indian ethos that contributes directly to transforming India, that is Bharat. Its goal is to maintain and care for the current dynamic knowledge society by offering high-quality education to all, regardless of religion, gender, caste, or creed, giving everyone an equal opportunity to grow and develop. It is also a step in the direction of India becoming a global knowledge giant. Our institutions are expected to develop a uniform curriculum and a deep respect for basic duties among pedagogy students, as well as a sense of constitutional values, attachment to one's country, and a conscious awareness of one's roles and responsibilities in a changing world, according to the policy. The policy vision is based on learners' deep-seated pride in being Indian and love for the country, expressed not only in words but also in spirit, intellect, and deeds, as well as in developing knowledge, skills, values, and dispositions that support human rights, sustainable development, and life, and supports a commitment to global well-being that truly reflects the global citizenry.



(Source: www.timesnownews.com)

As Part of The NEP 2020 Various Educational Phases will be Introduced:

No.	Stages of the Educational Life Cycle	Features
1.	Foundation Stage	The five-year foundation stage offers a flexible, multilevel, sport-based, activity-based, and discovery-based foundational education. Using long-tested Indian traditions and cultures, this time is continually improved via research and innovation for the cognitive and emotional stimulation of youngsters.
2.	Preparatory Stage	Construction on theater, research, and activity-based learning are all part of the three-year preparation phase. In addition, this period increasingly incorporates textbook-based formal classroom instruction. The emphasis is on introducing students to a wide range of topics and thoroughly preparing them for insights.
3.	Middle School Education Stage	Middle school education focuses on more abstract topics in each subject, such as physics, math, art, social sciences, and humanities, over the course of three years. In certain disciplines, experienced teaching is a technique of adoption with subject teachers. Students are taught the semester system, and two class level tests are held each year.
4.	Secondary Education Stage	A four-year secondary school curriculum is meant to include a wide range of courses, including liberal arts. Students will be exposed to the semester system and will study 5 to 6 courses each semester. This phase will be constructed on subject-based pedagogy and curricular design with an emphasis on more depth, more flexibility, more sophisticated thinking, and life ambitions. At the end of the 10^{th} and 12^{th} there will be Board

		examinations.
5.	Under-Graduation Education Stage	Each subject's undergraduate degree will be three or four years long, with several exit choices including a certificate after the first year, a diploma after the second year, or a bachelor's degree after the third year. The four-year undergraduate degree program, as well as majors, minors, and research projects, are chosen.
6.	Post-Graduation Education Stage	Master's degree - one year for students with a four-year bachelor's degree, two years for students with a two-year bachelor's degree, and a five-year degree focused on high-quality research in the last year for students with a five-year bachelor's degree. The master's degree will have a significant research component to help students improve their professional skills and prepare for a research degree.
7.	Research Stage	The research phase entails high-quality research culminating in a PhD. For full-time and part-time study in any major topic, multidisciplinary subject, or interdisciplinary subject for a minimum of three to four years. During the PhDprogram they should take an 8-credit education pedagogy course relating to their PhD. subject. The former MPhilprogram which lasted one year has ended.
8.	Lifelong Learning	NEP 2020 advocates lifelong learning and research to ensure that humans do not become outdated in terms of knowledge, skills, and experience needed to live a pleasant existence in society. Education and research, at any time of life, are thought to provide increased maturity and life happiness.

Increase the Percentage of GER in Higher Education to at Least 50% by 2035

The objective is to increase the total enrollment ratio in higher education, including vocational education, from 26.3% 2018 to 50% by 2035.

Multidisciplinary Education from A Holistic Perspective

The strategy covers inventive and adaptable curricular frameworks in science, arts, humanities, mathematics, and business, as well as creative study combinations, vocational education integration, and a complete, multi-disciplinary undergraduate curriculum for intense interaction. Points of entry and exit. A holistic and multidisciplinary education will help develop well-rounded individuals who possess critical 21st century capacities in fields across the arts, humanities, languages, sciences, social sciences, and professional, technical, and vocational fields; an ethic of social engagement; soft skills, such as communication, discussion and debate; and rigorous specialization in a chosen field or fields. In the long run, all undergraduate programs, including vocational, technical, and vocational disciplines, will take a holistic approach to education. The undergraduate degree will be for three or four years, with numerous exit choices and suitable credentials - a certificate after one year in a subject or field, including professional and vocational sectors, a diploma after two years, or a bachelor's degree after three years of study. The 4-year interdisciplinary undergraduate program will be the favored option since it allows students to participate in a complete spectrum of holistic and multidisciplinary education while also focusing on the major and minors of their choice.An Academic Bank of Creditshall be established which would digitallystore the academic credits earned from various recognized higher education is so that the degrees from higher education can be awarded taking into account credits earned.

For holistic and interdisciplinary education, model public universities, multidisciplinary teaching and research institutions would be developed, with the goal of achieving the best standards for multidisciplinary education across India. All efforts will be made to provide a great learning atmosphere that is both appealing and supportive, allowing all pupils to achieve. In a complete framework of higher education credentials that assures compatibility across institutions and programs and ODL, online, and conventional 'in-class' mode, all institutions and faculties will have the authority to innovate in areas of curriculum, pedagogy, and evaluation. HEIs will transition to a criteria-based grading system that evaluates student success based on each program's learning goals, and away from high-stakes examinations toward more consistent and thorough evaluations. To promote and support students from socioeconomically disadvantaged families, universities and colleges will develop high-quality support centers and provide appropriate financial and educational resources. All students will have access to vocational educational and career counselling, as well as counsellors for physical, psychological, and emotional well-being.

Institutional Architecture that is Rationalized

With big, well-endowed, active multi-disciplinary institutions, a new vision and architecture for higher education has been developed. Universities, colleges, and HEI clusters/knowledge hubs with 3,000 or more students will be converted into major interdisciplinary universities, colleges, and HEI clusters/knowledge hubs. A university is a multidisciplinary institution of higher education that provides high-quality undergraduate and graduate programs, as well as research and community service. A spectrum of institutions linked to research-intensive universities, teaching-intensive universities, and autonomous degree-granting schools would be allowed within the concept of a university.

The affiliation system will be implemented in 15-year increments, with a staged structure in place to provide institutions with numerical autonomy via a transparent system of graded accrediting. Each college is expected to evolve into a component college of a college or university granting independent degrees on a periodic basis.

National Research Foundation (NRF)

A new organization will be established to accelerate and extend research and innovation across the country. The NRF's ultimate goal will be to enable a research culture at our universities, to assist in the development of a research culture in the country through appropriate incentives and recognition for outstanding research, and to launch major initiatives for seeds and research at state universities and other public institutions with limited research capacity. Successful research will be identified and, when appropriate, implemented in collaboration with government agencies, industry, and private/charitable groups.

- **Financial Assistance to Students:** Students from SC, ST, OBC, and other SEDGs will be given special attention. The National Scholarship Portal will be extended in order to better support, promote, and track scholarship recipients. Private HEIs will be encouraged to provide a significant number of free cruises and scholarships to its students.
- **Distance and Open Learning:** The use of open and remote learning will be extended, which will help to get the total enrolment ratio up to 50%. Online courses and digital repositories, research funding, enhanced student services, credit-based accreditation of MOOCs, and other measures will be done to guarantee that they are in line with the best quality class programs.
- **Internationalization:** Internationalization of education will be accomplished through institutional partnership as well as student and faculty mobility, allowing top-ranked institutions from across the world to establish campuses in our country.

Faculty who are Motivated, Strong, and Knowledgeable

The success of higher education institutions is based on the quality and involvement of its teachers, according to NEP 2020. Faculty recruitment methods and criteria shall be fully established, impartial, and transparent at HEIs. Within the authorized structure, faculty will have the ability to develop their own curriculum and pedagogical techniques. Competence, incentive, recognition, and organizational leadership will all be used to foster excellence. Faculty who fails to satisfy the fundamental standards will be held responsible.

In Higher Education Good Administration and Leadership are Essential

All HEIs in India shall strive to become autonomous self-governing entities seeking innovation and quality via correct acknowledgment of hierarchical recognition and hierarchical autonomy, which would be phased out over a 15-year period. All higher education institutions in India will take steps to guarantee the highest quality leadership and create an institutional culture of excellence. The Board of Governors has envisioned institutional governance based on autonomy - academic, administrative, and financial-for each higher education institution. Individuals with higher educational credentials who can exhibit administrative and leadership abilities as well as the capacity to handle complicated circumstances will be considered for all leadership posts and institutions.

Regulation

There will be a single overarching umbrella body for promotion of higher education- the Higher Education Commission of India (HECI)- with independent bodies for standard setting- the General Education Council; funding-Higher Education Grants Council (HEGC); accreditation- National Accreditation Council (NAC); and regulation- National Higher Education Regulatory Council (NHERC). In the absence of an oversight framework, regulation will be "light but tight" to assure financial integrity and public support for honest self-disclosure to overcome conflicts of interest. The regulatory authority would regulate higher education in India by faceless intervention through technology and will have the right to penalize institutions that do not adhere to standards and regulations. Regulation, accreditation, and educational requirements shall be applied equally to public and private higher education institutions.

Teacher Education

The way ahead would be a four-year integrated stage-specific, subject-specific Bachelor of Education provided by interdisciplinary schools. A new and comprehensive National Curriculum Framework for Teacher Education, NCFTE 2021, will be formulated by the NCTE in consultation with NCERT. By 2030, the minimum educational degree will be a four-year integrated B.Ed. degree that teaches a variety of knowledge materials and pedagogy, as well as significant practical training in the form of student-learning in local schools. Ineligible teacher education institutes will face severe consequences.

A National Mentoring Mission will be established, with a huge pool of excellent senior/retired professors - including those who can teach in Indian languages - ready to give short and long-term advice/professional support to university/college instructors.

Education for Professionals

Every form of occupational education will be included into the higher education system. Technical universities, health science universities, legal and agricultural universities, and other institutions in these and other disciplines will all strive to become multidisciplinary.

Technology in Education

The National Educational Technology Forum (NETF), an autonomous entity, will be established to provide a venue for the open exchange of ideas on the use of technology to improve education, assessment, planning, and administration. It will be done to enhance classroom procedures, promote teacher professional development, increase educational access for disadvantaged groups, and expedite educational planning, administration, and management by properly integrating technology at all levels of education. Technology-based education platforms, such as DIKSHA/SWAYAM, will be better integrated across school and higher education. Higher education will play a key role in undertaking disruptive technology research and developing instructional materials and courses, including advanced domain online courses.

Digital and Online Education

As a consequence of recent epidemics and epidemic outbreaks, a thorough set of suggestions for promoting online education has been addressed to assure readiness with alternate means of quality education whenever and wherever traditional and customized teaching methods are not available. The Ministry of Human Resources and Development will establish a specialized unit to develop digital infrastructure, digital content, and capacity building, taking into account the e-learning demands of both schools and higher institutions.

Adult Education: The policy aims to achieve 100% youth and adult literacy by 2030.

Indian Languages are Being Promoted

A variety of efforts have been devised to ensure the survival, development, and vibrancy of all Indian languages. Moreand more higher education programs will employ the mother tongue/vernacular as a medium of instruction, and/or provide bilingual programs, in order to improve access and GER, as well as promote the strength, usability, and vitality of all Indian languages. It will be created the Indian Institute of Translation and Interpretation (IITI). Sanskrit and all Indian language institutes and departments will be considerably enhanced across the country. Pali, Persian, and Prakrit will each have their own national institutes. All Indian languages, including classical, tribal, and endangered languages, shall be preserved and promoted.

Financing Education

Education is a public service that should not be used for commercial gain or professional activities. The commercialization of higher education will be combated and stopped through a variety of techniques with checks and balances. All educational institutions will be subjected to the same auditing and transparency requirements as 'non-profit' organizations. The Center and the states will collaborate to boost public education spending to 6% of GDP as quickly as feasible.

The Central Advisory Board will be strengthened in order to guarantee cooperation and a focus on overall education quality. In close coordination with the MHRD and the concerned apex organizations of the states, CABE will create, clarify, evaluate, and improve the vision of continuing education in the country of reconstruction and revitalization. It will also design and assess organizational structures that will aid in the realization of this goal.

Initiatives by The Government

A New Education Policy strives to promote an inclusive, participative, and holistic approach to education that takes into account field experiences, empirical research, stakeholder input, and best practices lessons.

It's a gradual transition toward a more scientific educational method. The defined framework will aid in catering to the child's abilities-phases of cognitive development, social and physical awareness, and so on. If implemented in its entirety, the new structure has the potential to bring India up to level with the world's leading nations.

Conclusion

It would be a matter of recognizing aptitudes that will be the key to reconstructing India's educational system. Higher education is critical to a country's economy, social prestige, technological adoption, and the development of healthy human behavior.It is the obligation of the country's Department of Education to update the GER in order to include every citizen in higher education opportunities.India's National Education Policy 2020 is working toward these goals by opening up higher education to the private sector while also developing new policies to improve quality, attractiveness, affordability, and supply while enforcing rigorous regulations in all higher education institutions.NEP-2020 is expected to achieve its goals by 2030 by encouraging merit-based admissions with free-ships and scholarships, merit & research-based continuous performers as faculty members, merit-based proven leaders in regulating bodies, and strict quality monitoring through biennial accreditation based on self-declaration of progress through technology-based monitoring.All higher education institutions now known as associated colleges will be enlarged as multidisciplinary autonomous colleges with the authority to issue degrees in their own names or become constituent colleges of their affiliated universities.An unbiased organization The National Research Foundation will provide funding for creative initiatives in the fundamental sciences, applied sciences, and social sciences and humanities, all of which are priority research areas.

The higher education system will be converted into one that is discipline-focused and student-centered, with students having the option to pick majors and associated studies from a variety of fields. Faculty members have control over curriculum, methodology, pedagogy, and assessment methods thanks to the policy framework provided to them.These alterations will begin in the academic year 2021-22 and will last until 2030, when the first degree of change is expected to be apparent.As a result, the Indian higher education system is shifting from a teacher-centered to a student-centered approach, from information to knowledge, from marks to skills, from examinations to experiments, from learning to research, and from choice to competency.

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ICT in Teaching Learning Process

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Abstract

Well adapted materials without an effective method of teaching are practically useless, but with the proper tools and instructional methods a good teacher encourages each member of the class to participate directly in the learning experience.

Role of Teacher and classroom management: Teaching Divers – Language, Teaching English as a second language, Lister friendly lectures, Art therapies for disabled children, Encouraging Teacher – Student interaction, Co-Operative learning, Homework Strategies for students, Educational Collaboration, and To make instruction more memorable

Introduction

Teachers are an essential link between children with learning disabilities and the interventions and services that can help them all students' exhibit difficulties at one time or another with spoken or written language, memory, attention concentration, organizational skills, physical co-ordination and social behavior. However, if student consistently displays, difficulty with a group of these behaviors, it is a good indication of a possible learning disability.

There is no student with a learning disability who cannot learn, if a teacher has received appropriate paining and is willing to spend the time, using his or her expertise to reach and teach that child. TO meet the goal of equal access to the curriculum for everyone to enable each student to engage with his or her lessens in a meaning full way teachers must be prepared to provide use full alternatives in terms of both curricular materials and instructional delivery. Well adapted materials without an effective method of teaching are practically useless, but with the proper tools and instructional methods a good teacher encourages each member of the class to participate directly in the learning experience.

Role of Teacher and classroom management:

0 Teaching Divers – Language

A typical general education classroom made up of students who have varying skill levels and different culture and linguistic background. Many general educations feel that lack of knowledge and skills necessary to meet the needs of both students with disabilities and students who are learning English as a second language. Because of the nature of their disabilities.

General educators feed that they lack training in effective teaching strategies as well as the language fluency that could help them meet the diverse needs of students in their classroom.

Researchers have identified a number of teachers' behaviors that are related positively and powerfully to the academic success of both general and special education students.

0 Teaching English as a second language

Second language learners often exhibit the problems associated with learning any new language. Such as com reprehension and articulation difficulties, limited vocabulary and grammatical and sun tactical errors in their wanting and speaking. Too often, second – language learners are referred to and placed in special education, settings, perhaps because if a child who is learning English as a second language has not achieved a particular level of language acquisition and proficiency, become difficult and in turn, teaching and learning become challenging.

0 Lister friendly lectures

A listener friendly lecture is beneficial to students who are learning English as a second language and to students with learning disabilities when it in corporate simplified language, repatriation, demonstration or modeling.

Adopting text books can be an effective strategy for both English-language learners and students with disabilities.

Adopting assignment is an accommodation that general education teachers can use as a strategy that will benefit both English. Language learners and students with learning disabilities.

0 Art therapies for disabled children

Art therapy is a psychotherapeutic discipline that utilizes plastic and graphic art expression as a means of facilitating the expression of thoughts and graphic art expression as a means of facilitating the expression of thoughts and feelings than an individual may be unable or unwilling to verbalize. The goals of art therapy are formulated in accordance with each client's diagnosis needs, interests and capabilities and may include strengthening ego functions, increasing communication. Providing opportunities for sublimation and promoting insight.

Art therapy can help the child to increase his ability to control his impulses, to increase the level of his frustration tolerance and to delay gratification. It can also help him to perceive himself as a person who 'can rather than as someone who cannot.'

0 Encouraging Teacher – Student interaction

Conversational analysts place great emphasis on the fact that conversation is a participant. Managed system in which there is a constant process of ensures that real communication takes place. This is particularly true when communications is between members of different cultures.

Step by step description of a student. Centered teaching technique for assisting students to a higher skill level by challenging them to teach their class.

After the first few lessons when the students have picked up the textbooks pattern. And the class energy level lags, teachers are tempted to reach far learning games to enliven their classes.

The teacher exemplifies his model by teaching couples of lessons explaining and demonstration the communication strategies used at each stage.

0 Co-Operative learning

Co-operative learning is a well known strategy among educational researchers and par practitioners' co-operative learning take place when students work together in small groups instead of competing for recognition or grads. This idea of co-operative learning began with john Dewey's ideas of group activities.

The Jigsaw method of Co-operative learning is also good way to involve all students in speaking tearing in the classroom. In a Jigsaw activity a reading selection is cut up and divided among the group by the teacher. Each person reads their individual part silently any then presents group. Next, each co-operative group teachers the whole class about what they learned from their reading selection.

0 Homework Strategies for students

Homework is one aspect of the general education curriculum that has been widely reorganization as important to academic success teachers have long used homework to proviele additional learning time. Strengthen study and organizational skills and in some respects, progress. Generally I when students with disabilities participate students with disabilities participate in the general education curriculum; they are expected to complete homework along with their peers. But just as students with disabilities may need instructional accommodations the classroom. They also need homework accommodations.

0 Educational Collaboration

Educational collaboration is important to the success of inclusive classrooms. Such, collaboration promotes shared ownership among faculty and suppers the meaningful pro participation and sense of belonging of students with disabilities Educational collaboration are various types of pull in supports, as well as collaborative problem solving procedures.

Pull in support: the practice of bringing support services to students with disabilities. As opposed to pulling these students out of general education classrooms for these services. Is often referred to as providing pull in support.

Collaborative problem solving in order to facilitate the incusing of students with disabilities it is critical that general and special education teachers routinely meet to engage in collaborative problem solving around issues that may emerge in the inclusion process.

0 To make instruction more memorable

Three explosions are stimulant sly vibrating through the schools and classrooms. First an explosion of content information to be taught. Second is an increased emphasis a students learning out comes. Third is the growing number of students with learning and attention difficulties who struggle with grasping new cancels and retaining information are time considering following in situational strategies, which are designed to maintain student interest, maximize student engagement and optimize the memory of content information over time.

0 Conclusions

No single teaching strategies is ideal each has advantages and drawbacks the optimal teaching strategies depends on the interaction of the student, the teacher and the situation in practice the choice of strategy is made so quickly that it is almost instinctive. There is seldom time ruminate on the optimal teaching technique for given situation. Depending on the natural learning and teaching styles of teacher certain teaching strategies are more comfortable and hence used more Frequently than others in your practice using a mixture of methods makes teaching more enjoyable and is probably more effective. Each strategy can be learned and practice.

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“Kaushik Parekh’s Table”

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Abstract

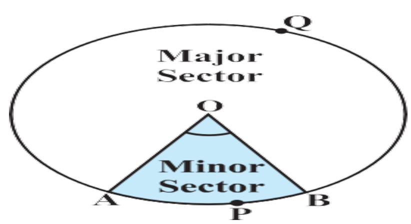
We are already familiar with some methods of finding perimeters and areas of simple plane figures such as rectangles, squares, parallelograms, triangles, and circles. Many objects that we come across in our daily life are related to the circular shape in some form or the other. Cycle wheels, wheelbarrow (Thella), dartboard, round cake, papad, drain cover, various designs, bangles, brooches, circular paths, washers, flower beds, etc. are some examples of such objects. So, the problem of finding perimeters and areas related to circular figures is of great practical importance.

In this research paper, we shall do our discussion with a review of the concepts of circumference and area of a circle in short way and apply this knowledge in finding the areas of two special ‘parts’ of a circular region (or briefly of a circle) known as sector and segment.

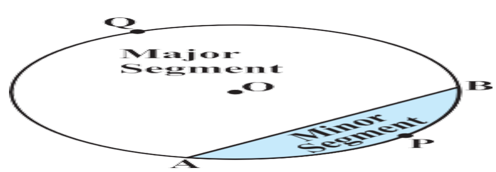
Key Words: Kaushik Parekh’s Table, Area, Circumference / Perimeter, Circle, Sector, Segment, Triangle

Introduction

We have already known the terms sector and segment. The portion (or part) of the circular region enclosed by two radii and the corresponding arc is called a sector of the circle and the portion (or part) of the circular region enclosed between a chord and the corresponding arc is called a segment of the circle.



As shown in the figure shaded region OAPB is a sector of the circle with centre O. AOB is called the *angle* of the sector. Unshaded region OAQB is also a sector of the circle. For obvious reasons, OAPB is called the *minor sector* and OAQB is called the *major sector* and angle of the major sector is 360° – AOB.



Now, as shown in the figure in which AB is a chord of the circle with centre O. So, shaded region APB is a segment of the circle. Unshaded region AQB is another segment of the circle formed by the chord AB. For obvious reasons, APB is called the *minor segment* and AQB is called the *major segment*.

Some Literacy Work

There are some Constants for area of sector, segment and triangle at different angles as shown in below table.

For **Area** multiply given constants by r2

&

For **Circumference** multiply given constant by 2r

Reference: r2=227=22×127×12r2=26484r2

Step – 1

Shape / Angle	30°	45°	60°	90°
Minor Sector	184	184	184	184
Major Sector	184	184	184	184
Triangle	184	184	184	184
Minor Segment	184	184	184	184
Major Segment	184	184	184	184

Step – 2 (3=1.73 & 2=1.41)

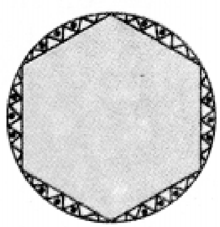
Shape / Angle	30°	45°	60°	90°
Minor Sector	2284	3384	4484	6684
Major Sector	24284	23184	22084	19884
Triangle	211=2184	21284	21384	214=4284

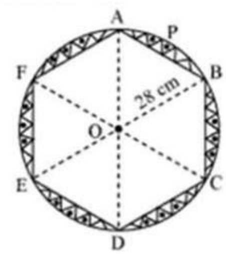
Minor Segment	184	33-21√284	44-21√384	2484
Major Segment	26384	231+21√284	220+21√384	24084

Example-1

A round table cover has six equal designs as shown in Fig. if the radius of the cover is 28 cm, find the cost of making the designs at the rate of ₹. 0.35 per cm2. *(Use* 3 *= 1.73)*

Solution:





Here, r = 28 cm

Since, the circle is divided into six equal sectors,

∴ Sector angle = 360°6 =60°

Now, Area of sector = r2360

∴ Ares of sector with θ=60° and r = 28 cm

= 227× 28 ×28 × 60360

= 44 ×283 cm2

= 410.67 cm2 … (1)

Now, area of 1 design

= Area of segment APB

= Area of sector AOBP – Area of Δ AOB … (2)

In Δ AOB, ∠AOB=60°, OA=OB=28 cm

∴ ∠OAB=60° and ∠OBA=60°

⇒ ΔAOB is an equilateral triangle.

⇒ AB=AO=BO

AB=28 cm

Draw OM⊥AB

∴ In right ΔAOM, we have

OMOA=sin 60° = 32

OM=OA × 32 cm

OM=28 × 32 cm

OM=143 cm

∴ Ares of ΔAOB= 12 AB×OM

=12 ×28×143 cm2

=14×143 cm2

=14×14×1.73 cm2

=339.08 cm2 … (3)

Now, as all we know

Area of Segment = Area of Sector – Area of Triangle

So, from (1), (2) and (3), we have:

Area of segment APB=410.67-339.08 cm2

=71.59 cm2

Now,

⇛ Area of 1 segment or 1 design is =71.59 cm2

So, Area of 6 equal segment or 6 equal designs are = ?

=71.59×6

=429.54 cm2

Now,

⇛ Cost of making the design at the rate of ₹. 0.35 per cm2

=₹ 0.35×429.54

=₹ 150.34

Same sum with the help of Kaushik Parekh's Table

From the table,

Area of Minor segment = 44-21√384 r2 cm2

= 44-21(1.73)84 ×28×28 cm2

= 44 -36.333 ×28 cm2

=71.58 cm2

Now, Area of 6 Minor Segment =6 ×71.58 cm2=429.52 cm2

Now, Cost of making the design at the rate of ₹. 0.35 per cm2

=₹ 0.35 ×429.52

=₹ 150.34

Example – 2

A chord of a circle of radius 84 cm subtends an angle of 30° at the centre. Find the area of the major segment of the circle.

Solution:

Radius of the Circle =15 cm

Central angle subtends by chord =60°

Area of the Minor Sector =r2360 cm2

= 227×84×84×30360 cm2

=1848 cm2

Area of the Triangle formed by radii and chord = 12 ×a×b×sinθ cm2

= 12×84×84×sin 30°

= 12×84×84×12

= 1764 cm2

Area of the Minor Segment = Area of minor sector – Area of triangle

=1848-1764 cm2

=84 cm2

Area of the Circle =πr2 cm2

=227 ×84 ×84

=22176 cm2

Now,

Area of the Major Segment = Area of the Circle – Area of the minor segment

=22176-84

=22092 cm2

Same sum with the help of Kaushik Parekh's Table

From the table,

Area of the Major Segment =26384 ×r2 cm2

=26384 ×84 ×84

=22092 cm2

Conclusion

As shown above we can conclude that with the help of this **Kaushik Parekh's Table** we can find the solution in short time and with 100 % accuracy. This table is used for 30°, 45°, 60° and 90° angle. It is very easy method to find the solution.

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ACCOUNTING AND REPORTING PRACTICESOF HUMAN RESOURCES IN HINDUSTAN PETROLEUM CORPORATION LIMITED

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Abstract

Human resource is considered as most significant and valuable asset which acompany possesses and onwhich its profitability depends. It is important for the organizations to conduct human resource accounting practices in order to know how efficiently their human asset is utilized. Present study is conducted with a view toknow human resource accounting practices in Hindustan Petroleum Corporation Limited. The study highlights disclosure pattern of information regarding human resource accounting in HPCL. It also highlights relation between HRV andnet profit, HRV and employees cost and HRV ant total assets

Keywords: Human Resource Accounting, Employees cost, human resource value

1. INTRODUCTION

The resources required for an organization can be classified into two categories, viz., human and physical resources. Machines, materials, money are considered as physicalresources. The physical resources cannot work themselves.So the success of a business relies on how best thesescarce physical resources are used by the human resource.An organization having immense physical resources maysometimes miserably fail as it does not have right peopleto manage and to conduct its affairs, yet the accountanthave concentrated on the financial and physical resources,and neglected this important ingredient of social system,despite the fact that the performance of the enterprise itself is the product of human activity.

A balance sheet that does not reveal the current value ofcompany's human assets does not reveal the real pictureof company's position. This is because the future profit andposition of a company always depend upon the quality ofits human talent.

Human Resource Accounting is accounting for people asorganizational assets. It involves identifying and measuring data about Human Resource and communicating thisinformation to interested parties. It is an information system that tells to the decision makers of organization whatchanges over time are occurring to the Human Resource oforganization.

Some important definitions given by the competent authors are as follows:

Eric Flamholtz (1971) defines HRA as “the measurementand reporting of the cost and value of people in organizational resources”

American Accounting Association (1973) defines HumanResource Accounting: as “the process of identifying andmeasuring data about human resources and communicating this information to the interested parties.”

Thus, HRA not only involves measurement of all the costs/ investments associated with the recruitment, placement,training and development of employees, but also thequantification of the economic value of the people in anorganization.

2. Review of literature

- Syed Abdulla Al Mamun (2009) observed the relationship between commercial attributes and HRA exposure of listed companies of Bangladesh. The study shows that companies with high profitability and larger companies intended to expose further HRA information than lower companies. In addition, it also finds that largely regulated fiscal companies are revealing further HRA information than non-financial companies. The paper also reveals the fact that the position of exposure of the listed companies isn't so high and it was just one fourth of the selected HRA exposure particulars which can be content for farther research concentrating on the reasons of reticent attitude of listed companies in Bangladesh to discover the HRA information.
- H.K.Singh and Vivek Singh (2009) studied HRA practices of Infosys technology limited and its utility in HR decision. The investigators conclude that the HRA practice of Infosys technology limited is satisfactory. Still, they suggested many way to make it more effective. The investigators suggested that Infosys should discover elements of employees cost, information regarding the addition of variables like amortization of human resources, idle time, lock outs, faith of employee’s etc. They also suggested that as far as possible, rate of discounting future earnings of workers should be kept constant.
- Dalvadi, (2010) observed that success of these institutions is contingent on the quality of their human resource – its knowledge, expertise, capability, encouragement and understanding of the organizational culture. Hence, it's imperative for the enterprise to understand the

significance of the human and thus record it in the books of accounting. In present commercial world whether it belongs to manufacturing, Trading or Service human is at center point. The study focuses on Human Resource Accounting (HRA) Practices of selected private and public limited companies.

- Dr. Nidhi Sharma and Hitendra Shukla (2012) observed that there's actuality of an inverse relationship between the performance criteria (ROA) of a enterprise and its position of Human Resource Accounting Disclosure. According to experimenter this is obvious as return on assets (ROA) indicates a company's overall profitability. This will motivate a company to provide applicable information to investors and stakeholders regarding investment in human capital which isn't reflected on the balance sheet.

3. Objectives

The main objectives of the study are as follows:

- To study Human Resource Accounting practices followed by Hindustan Petroleum Corporation limited.
- To study employees strength and their valuation for the particular period.
- To study the relationship between net profit and human resource value.
- To study the relationship between human resource costand human resource value.
- To study share of human assets in total assets.

4. Company profile

Hindustan Petroleum Corporation Limited is a Government of India enterprise with its headquarters at Mumbaiand Maharashtra. It had originally been incorporated as acompany under Indian Companies Act 1913. It is a megapublic sector undertaking with Navratna status , and aForbes 2000 and Global Fortune 500 company. It is listedon the Bombay Stock Exchange (BSE) and National StockExchange (NSE), India.

HPCL owns and operates two major refineries producing a wide range of petroleum fuels and specialties, onein Mumbai and the other is in Vishakhapatnam. HPCL alsoowns and operates the largest Lube Refinery in the countryproducing Lube base oils of international standards, with acapacity of 428 TMT which accounts for over 40% of theIndia's total Lube Base Oil production.

HPCL has the second largest share of product pipelines inIndia with a pipeline network of more than 2,500 kilometers for transportation of petroleum products.

5. Human Resource Accounting Practices in HPCL

The Human Resource is by far the best of the available resource to any Company. The Corporation considers Human dimension as the key toOrganization's success. Several initiatives for development of Human Resource to meet new challenges in the competitive business environmenthave gained momentum. HPCL recognizes the value of Human Resource, as its employees are committed to achieve excellence in all spheres.The Corporation has a mix of energetic youth and experienced seniors who harmonize the efforts to achieve the Corporation's goals.

Over the years, the Corporation has been using 'Lev & Schwartz' model to compute the value of Human Resource. Basis this model, the value ofHuman Resource, which is immense, is measured at ` 38,219 Crore (2019-20: ` 38,318 Crore). The following assumptions have been factoredin this computation: –

- Employees' compensation is represented by direct & indirect benefits earned by them on Cost to Company basis.
- Earnings up to the age of superannuation are considered on incremental basis taking the Corporation's policies into consideration. Such future earnings are discounted @ 6.86% (2019-20: 6.87%).

It divides allthe employees into two groups, viz. management employees and non-management employees. It also discloses agewise distribution of the employees which include 21-30,31-40, 41-50, 50 and above. The title used to disclose information of human resource valuation in HPCL is 'HumanResource Accounting'. The company does not follow constant rate for discounting future earning, it varies from yearto year.

6. Research Methodology

6.1. Research problem

The research problem of the study is:

"ACCOUNTING AND REPORTING PRACTICES OF HUMAN RESOURCES IN HINDUSTAN PETROLEUM CORPORATION LIMITED"

6.2. Period of study

The period of study is confined from 2016–17 to 2020–21 as no data is available before this period, of the selectedcompany.

6.3. Sampling Technique

Convenient sampling technique is used in this study.

6.4. Methods of data collection

Present study is mainly based on secondary data which werecollected from annual report of the company, related websites,different books of account and previous research papers.

6.5. Data analysis

To make the data easily understandable, statistical method oftabulation is used. Statistical technique of correlation is alsoused for the analysis and interpretation of data. Calculationis done with the help of computers specifically MS Excel.

6.6. Limitations of the study

The following are the limitations of the study.

- Only one company is considered for the study of Human Resource Accounting Practices.
- The study period of said study is limited to five years only i.e. from 2016–17 to 2020–21.
- The said study is based on secondary data only, collected from annual reports of companies. The limitations of the secondary data influence the study.
- Analysis and conclusion are human interpretation and perceptions, so they may be biased.

Over and above there are certain limitations of Human Resource Accounting which also affects the study.

7. Analysis and interpretation

7.1. Value addition in HR

Following table has been drawn to know human resourcevalue addition over previous year, the growth of HRV interms of percentage and value of HR per employee. Following formulas are used to find various values:

- Value addition over the previous year: HRV of current year– HRV of previous year

- Value addition in percentage: Value Addition over the previous year/ HRV of previous year*100
- Value of HR per employee: HRV/No. of employee

Table 1: Growth of HRV and HRV per Employee

Financial Year	HRV	Value addition over the P.Y.	Value addition in %	No. of employees	HRV per employee
2016-17	34,881	-	-	10,422	3.347
2017-18	32,030	-2,851	-8.174	10,352	3.094
2018-19	33,178	1,148	3.584	10,239	3.240
2019-20	38,318	5,140	15.492	9,696	3.952
2020-21	38,219	-99	-0.258	9,448	4.045

(Source: *Compiled and computed from annual reports of HPCL)*

The table shows fluctuating trend in HRV and no of employees down fall in the study period. We can say that HRVis increasing from the year 2017-18 to 2019-20, it was decreased in 2017-18 and 2020 -21 and again increased in 2018-19. Highest value addition in percentage is in the year 2019-20 e.i.15.492 % and in the year 2017-18 value of HR is decreasedup to – 8.174 %. Value of HR per employee is also decreased in 2017-18, and again increased in the year 2017-18 to 2020-21. The reasonsfor value addition in HRV may be effective recruitment,proper training and better employer employee’s relationship. In the year 2020-21 HRV is decreased. Here the reasons may be decreased no of employees, ineffective recruitment and ineffective training.

In short, we can say that there is positive relationship between number of employees and human resource value ofthe company. The increase or decrease in number of employees leads to increment or decrement in HRV of thecompany.

7.2. Human resource cost, human resource value and net human resource value

The following table is drawn to know human resource cost,percentage of human resource cost in human resource value and net human resource value. All kind of assets yieldsome income to the company. Human resource is the mostimportant assets of the organization. An organization also needs to incur some cost on recruitment, developmentand retention of employees. It is important for an organization to know what cost it has incurred for the human assetsover the period of time and what is the change in value ofhuman assets. Following formulas are used to find variousvalues:

Percentage of HRC in HRV: HRC/HRV*100

Net HRV: HRV-HRC

Table 2: Percentage of HRC in HRV and Net HRV

Financial Year	HRV	Employees Cost	Percentage of HRC in HRV	Net HRV
2016-17	34,881	2,946	8.446	31,935
2017-18	32,030	2,859	8.926	29,171
2018-19	33,178	2,938	8.855	30,240
2019-20	38,318	3,193	8.333	35,125
2020-21	38,219	3,188	8.341	35,031

(Source: *Compiled and computed from annual reports of HPCL)*

Correlation coefficient between Human Resource Value andEmployees Cost = 0.979.

Thus, there is highly positive relation between human resource value and employees cost.

From the above table, we can see that Human resourcecost fluctuating during the study period. Human resource cost is minimum 8.333 and maximum8.926 in percentage which is very much significant. Percentage of employees cost in HRV and net HRV shows efficient use of Human resource.

7.3. Share of HRV in total assets and relation between net profit and HRV

The assets of an organization comprise of fixed assets,variable assets and intangible assets including human assets. Human resource is an important asset of an organization. It is important for a decision maker to know share ofhuman asset in total assets and relation between net profitand HRV. Following formula is used to find various values:

Human assets percentage in total assets: HRV/Total assets*100

Table 3:Percentage of Human Assets in Total Assets, Relation between Human Assets and Net Profit

Financial Year	HRV	Total Assets including Human Assets	Net Profit before Tax	Human Assets Percentage to Total Assets
2016-17	34,881	9,021	85,876	40.618
2017-18	32,030	9,202	76,366	41.943
2018-19	33,178	9,339	80,963	40.979
2019-20	38,318	1,573	90,207	42.478
2020-21	38,219	14,247	94,075	40.626

(Source: *Compiled and computed from annual reports of HPCL)*

Correlation coefficient between Net profit and HRV= - 0.162

Correlation coefficient between Total assets and HRV=0.968

Thus, we can say that there is highly positive relation between total assets and human resource value where asthere is lack of relation between net profit and human resource value.

From the above table we can see that share of human asset in total assets varies from 40.618 to 42.478. From this wecan say that share of human asset in total assets is verymuch significant. In the year 2016-17, HRV and humanassets percentage to total assets is minimum. Inefficientmanagement, ineffective training or ineffective recruitmentmay be some of the reasons for this.

8. Conclusion

Human resource is the most important input in any organization. The investment directed to raise knowledge; skillsand aptitude of the employees of the organizations arethe investment in human resource. Thus, it is important forthe decision makers to examine how efficiently human resource of an organization is utilized. And thus, it is worthwhile to do human resource accounting practices in corporate sectors in India.

The study reveals that Hindustan Petroleum Corporationlimited discloses information regarding human resource accounting up to a great extent. There is direct relationshipbetween HRV and employees cost, and also in HRV andtotal assets. But there is no relationship between net profit and HRV of the company. Proper recruitment, effectivetraining and development, better employer employee's relationship can lead to greater human resource value whichultimately results in organization's growth and success.

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COLLECTION DEVELOPMENT OF ACADMIC LIBRARY

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Agood collection of documents is the base of each library.Inorder to develop a good collection. Documents of various types and in different physical forms are to be procured. Therefore, the manager or the librarian should know some of the important types of conventional, non-conventional as well as modern neo-conventional documents, their characteristics and utility. There are some principles of selection of these documents which guide the librarian in making a judicious choice of a document. The production of documents today is enormous. Thousands of them are in wide varieties, which are being brought out every day.

Introduction

Collection development is one of the most challenging and imaginative processes of the library profession whereby, the library staff acquires a variety of materials to meet the demand of its users. The phrase „collection development" does not seem to be new to the librarians for most of them often use it as a synonym for the terms „selection" and „acquisition". It may, however, be pointed out that „collection development", as also mentioned by Gardner and rightly so, is more encompassing a term since it involves more than just selection and/or acquisition. In recent years, the term "Collection Development" has come to encompass a board range of activities related to the policies and procedures of selection, acquisition and evaluation of library collection. Collection development is an important activity of a librarian. The users are the best judge of the collection of a library. They are in the best position to know what is available in the library and what is not. They can better tell whether the collection is really satisfying their information needs or not. Again, of all types of library users in university, researchers and scholars are in an advantageous position to offer comments on the quality of the collection, because they are well familiar with the whole range of literature in a given subject area. They may therefore, usefully suggest as to what could be acquired in order to strengthen the holdings and also fill in the gaps in the existing collection.

Principles of Selection of Documents

Selection of documents is both an art and a science. The following principles of selection most important and should be given weight. They are as follows:

(a) Drury's Principle. It was enunciated by Drury in 1930. It states, to provide the right book to the right reader at the right time. In this principle reader is the central theme. A document is right or otherwise is to be provided when the user needs it for use. The selector should know the users and their requirements. He should select only that material which caters to the informational, educational and recreational needs of the users

(b) Dewey's Principles. The famous library science scholar also gave a principle for selection of documents for the libraries, which states the best reading for the largest number at least cost. According to this principle a library should select within the financial resources available, the best documents which may satisfy the information needs of maximum number of users.

(c)McColvin's Principles. This principle was advanced in 1925 by L. R. McColvin He states that-Books in themselves are nothing. They have no meaning until they are made serviceable by demand. Hence the book selection, by this principle, is directly related to demand, the greater is the resultant and possible service. The term supply refers to the availability of reading material in all its varieties. Demand on the other hand, means expressed and unexpressed informational needs of the users. This principle advocates the selection of only those documents which are demanded by the users for their informationalneeds

(d) Ranganathan's Principle. The first three laws of Library Science enunciated byRanganathan are most helpful in formulating the principles of selection of the documents rihmaries. The first lav Le, documents are for the use, makes it obligatory that only those documents should be selected which are of the use of the users of a particular library. While selecting the documents, the present and potential requirements of the users must be kept in view The second law, Ir., every reader his/her document, directs the selector to cater to the informational needs of all the users of the library. The third law,

Ie., every document its reader, suggests that all efforts should be made to put to use only. those documents of value which have been selected anticipation of the needs of the usen

Book Selection Policy and Programme

The policy is essential in the selection process for guiding and determining future decision regarding the selection of library materials. Book selection policy establishes principles and of selection and provides criteria that should be used as a guide in selection In Public Library following rules are followed while selecting the books

(1) Book selection should include all the subjects that apply to community condition and that reflect community interest.

(2) make sure your collection of local history is as extensive and as useful as possible.

(3) Avoid selection of books for which no demand is evident and books that have definitely outlived their usefulness

(4) Maintains impartiality in selection. Make no special opinions on controversial subjecti (v) Provide as far as possible books that will meet the needs of specialist or others whose work will benefit the community.

(5) Maintain so far as possible promptness and regularity in supplying new books In School Libraries following rules are followed:

- Provide material that will enrich and support curriculum.
- Provide material that will stimulate growth in factual knowledge, literary appreciation, aesthetic values and ethical studies
- Provide material representative of various religious, ethnic and cultural groups and theircontribution to our heritage.

  in College Libraries following rules are followed while selecting the books:
- Should provide resources needed to meet curricular dem;2ands of the college.
- It should acquire materials like periodicals, encyclopaedias, etc. necessary for inspiring teaching
- Should provide general collection of classics so as to instill in the students enthusiasm for great books from which will spring the lifetime habit of good reading.

Book Selection Tools

Many libraries are not aware of books available in the market; as a result they are unable to select books of interest to their users. Different tools are there which help librarians to select thebooks. Some of these tools are

(a) Publishers catalogue

(b) Bookseller's lists

(c) Book Reviews in Newspaper

(d) Book Reviews in books

(e) Reviewing periodicals

(f) National bibliographies

(g) Trade bibliographies

(h) Subject bibliographies

ACQUISITION OF DOCUMENTS IN THE LIBRARIES

Acquisition of the documents for collection development in the libraries is the main and important task, which involves a series of routine operations performed according to systematic procedures. Acquisition work of the documents comprises following 3 distinct functions, viz. selection procurement and accessioning

(a) Selection

Selection of the documents for the library is the first phase of the Acquisition work of the library. There are two aspects in the selection work, planning and procedure, where planning here relates to the various preparations and arrangements which are to make to carry out the procedure efficiently. The selection of documents in libraries is conditioned by three factors. () demand, (i) supply and (tre finance Therefore, planning must be mainly concerned with these three factors. Demand and supply must be known and the finance must be secured. Further men and materials required for the work need to be arranged. Hence planning is compiled with the four heads namely

- ascertaining demand
- finding resources,
- allocating funds and
- Arrangingpersonals for the work.

(b) Procurement

Once the selection of the documents is finalised the library has to proceed with the procurement of documents. The work of procurement of documents is divided into planning and procedure. Procurement has to be planned with due regard to matters like different means of procurement, preparations and arrangement of ordering. The second phase of procurement is procedure of ordering. The ordering procedure relates with the three stages, te, pre-ordering work, order placing work and supply receiving work.

(c) Accessioning

Accessioning is the main work related with acquisition of the documents, which is done by accession section of the library. Accession section has to be planned to perform two sets of activities namely, accessioning or taking into stock all required documents and passing the bills for payment.

The basic question involved in accessioning work is the accession register, which is the basic record of the library about each document. All types of documents received, whether purchased or received as gift or on exchange are entered in this accession register, keeping the accession numbers running continuously. The accession number is assigned to each document entered in the accession register, which is a unique number and which identifies the document.

The bills relating to the books accessioned are then handed over for passing to accounts section and the books then are sent to the technical section of the library for processing work. Sometimes libraries may face many problems in acquisition of documents.

Building up a collection of documents and other materials in the libraries is a major and important function, which is done through acquisition. The acquisition of the material for the libraries is not an easy task. It has got its own so many problems. Major problems are brought out here so that the workers who are engaged in acquisition work may prepare to face them. These problems are as follows:

1. Collecting Factors of Demand, Supply and Finance

Demand, supply and finance are the 3 major factors governing collection development of the libraries both demand and supplies always increase while finance is always inadequate. In order to meet the growing pressure of demand and supply, fund of the libraries also ought to grow, butgenerally, this does not happen. The ultimate result of the conflict between these factors in that the library will not be able to buy all that material it should. This is happening even in the riches libraries

2. Book Markets are Far-off

The major book markets are the important factors in building the collection of the libraries, which are mostly concentrated in our country only in major cities of Bombay, Calcutta, Madras and Delhi. While the libraries of other parts of the country do not have easy access to these markets. Hence far-off markets create problems in acquisition work of the libraries.

3. Local Book Sellers

Most of the libraries depend on the local book suppliers for supply of the books, which neither do nor stock many publications of interests of the libraries. They cannot supply specific order to the books. As a result, orders for many items may not be executed and the financial year goes to be end without purchasing.

4. Foreign Publications

Every library collects foreign publications also due to their importance. They are costly publications Procuring them from other countries against orders may take 3 to 6 months. Even, there are su many other formalities to be complete which take time. And hence the documents procured from foreign countries create problems.

5. Indian Publications

There are so many problems regarding Indian publications also. They are as follows:

(a) Publishing industry is not fully organised in the country.

(b) The authors of the publications have their own publishing and distributing houses in thecountry.

(c) The publishing on Indian languages is almost completely on regionwise. So, because of these reasons, it is difficult for libraries to keep track of all Indian publications.

6. Out-of-Print and Rare Books

The out of print and the rare books inclusion enriches every library collection but these are not available through normal trade channels. Seeing the importance of these publications, special efforts should be done to acquire them for the library.

SELECTION AND ACQUISITION OF NON-BOOK MATERIAL

The criteria for selection of non-book materials are:

- Authenticity. It includes whether up to date information is presented or not, whether facts are impartially presented and accurate facts are provided or not.
- Format of Presentation. It sees how concepts are presented and vocabulary is used.
- Scope. Coverage, the intellectual coverage.
- Organization of free How information is presented in a particular non-book material Ewe look into logical development of sequence, look for any special feature f.e.descriptive notes, user guidance, etc.
- Physical Characteristics Ease in handling for use and storage, minimum instruction for individual use, attractive packing, durability, and ease of repair.
- Technical Aspects Clarity, tone fidelity, in focus pictures, effective colour use, completesynchronization of sound and image.
- Interest, Relationship to user's experience, intellectual challenge, curiosity satisfaction. Imagination appeal, human appeal, sensory appeal.
- Cost Conforming to budget, less expensive for satisfactory substitute's average supplemental costs for replacement, repair, physical processing, and storage.

Acquisition of Non-book Materials

Acquisition of non-book materials consist of identifying what exists in the market by making use af different selection aids. Some of selection aids are buying guides, Reference tools, checklist,

FUNCTION OF MAINTENANCE WORK OF DOCUMENTS IN THE LIBRARY

When the processing work of the library collection is completed, it is housed properly in the library for providing easy and convenient access to the users. Maintenance work of collection: of documents is done with the task of physical storage of documents with their orderly arrangement and other related activities. Thus maintenance is the work of housing a collection and maintaining an order of arrangement of the various types of documents for providing access to them. Maintenance work comes between the processing work and circulation work of the documents

In all the library functions, the maintenance work is the least discussed in professional literature. However, the importance of maintenance work cannot be neglected. In fact, the ultimate success of various other functions like acquisition, classification and cataloguing rests on the efficiency of maintenance work. Documents cannot be serviceable to users unless proper care is taken to organise and maintain the document collection. It is also very important task in the library.

Functions of Maintenance Work

Maintenance work of the document collection involves continuous monitoring of the proper stocking, arrangement and display of books on the shelves in the stack rooms and taking care of them. This essentially implies following two aspects.

(a) Arrangement of the documents on the shelves and organisation of the stack room of thelibrary

(b) Conservation of books, and overall cleanliness of the stack areas. In addition to the above, the following are the specific functions of the maintenance work ofthe collection of the documents.

- Shelving the documents
- Location of documents
- Shifting of collection
- Dusting and cleaningof collection
- Preparation and maintenance of guides
- Maintenance of documents.
- Shelf rectification
- Maintenance of Shelf list
- Stock verification
- Binding
- Vigilance.

In an open access library, shelf organisation and arrangement of books are of primary importance. Books on different subjects are to be easily accessible to readers. This means that the professional classification schedules are rarely in tune with the layman's expectations of sequence of books on shelves. A classification scheme does not provide the sequence of subjects on in popularity. Recent arrivals or latest publications must be displayed at a prominent place to attract the attention of readers.

The second aspect of maintenance work is preservation of the documents. Only documents in good physical condition should be allowed to be kept on shelves. Torned, soiled and damaged documents should be removed from shelves for repair and re-binding at time to time. Stack room must always be cleaned regularly to protect documents from dust, dirt and insects. Thus, in this way we can maintain the order of books on shelves and take care of them.

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સરદાર વલ્લભભાઈ પટેલ પ્રેરિત સંસ્થાઓ: એક ઐતિહાસિક અધ્યયન

શ્રી હર્ષદભાઈ કે. ચૌધરી (એમ.એ., એમ.એડ.)
પી.એચ.ડી સ્કોલર, હેમચન્દ્રાચાર્ય ઉત્તર ગુજરાત યુનિવર્સીટી, પાટણ

સરદાર વલ્લભભાઈ પટેલ પ્રેરિત સંસ્થાઓ.

1. Gujarat Vidyapith.

૧. ગૂજરાત વિદ્યાપીઠ.

તેમનું જાહેર રાજકીય જીવન એ ખુલ્લી કિતાબ જેવું છે. વલ્લભભાઈ પટેલના સમસ્ત વિશાળ જીવનમાં તેમણે ગાંધીજીના આદર્શો પર જે સંસ્થાઓ ગુજરાતમાં સ્થાપી તેને પ્રેરણા, માર્ગદર્શન અને હુંફ આપી તેનો ઉછેર કર્યો હતો. હિંદની પરતંત્રતાની બેડીઓમાંથી આઝાદી મેળવવાના પ્રયત્નોના પ્રયાસો માંનો એક પ્રયાસ એટલે "અસહકારનું આંદોલન". આર્થિક, કાનૂની અને શૈક્ષણિક બહિષ્કારના એક ભાગ તરીકે સ્વદેશી શિક્ષણને અપનાવી સરકારી શાળા-કૉલેજોનો વ્યાપક બહિષ્કાર કરવાનો કાર્યક્રમ અપનાવવામાં આવ્યો ત્યારે સ્વદેશી શાળા-કૉલેજોની સ્થાપના કરવાનો પ્રશ્ન ઉપસ્થિત થયો. તેમાં અનેક ગાંધીવાદી કાર્યકરોએ રાષ્ટ્રીય શાળાઓનો પ્રારંભ કર્યો. તેવી જ રીતે કૉલેજો અને યુનિવર્સિટીઓ પણ શરૂ કરવામાં આવી. તેમાં જે વિદ્યાપીઠો અસહકાર વખતે સ્થપાઈ. તેમાં ગૂજરાત વિદ્યાપીઠના વિચારનો ઉદ્ભવ ગાંધીજીને આવ્યો ત્યારથી સરદાર વલ્લભભાઈ પટેલ આ સંસ્થાની સ્થાપના પૂર્વેથી જોડાયેલા હતા અને છેક સુધી ગૂજરાત વિદ્યાપીઠના ટ્રસ્ટી, કુલનાયક તથા કુલપતિ તરીકે તેના વિકાસમાં વલ્લભભાઈ પટેલે સિંહ ફાળો આપ્યો હતો.

તેઓ જાણતા હતા કે વિદ્યાપીઠ જેવી સંસ્થાઓ આઝાદી પ્રાપ્તિના જંગમાં કામ તો લાગશે જ પણ સ્વાતંત્ર્ય પ્રાપ્તિ પછી પણ તેનું મહત્વ તેના સિદ્ધાંતો અને ગામડાંમાં કામ કરવાનો મંત્ર જે ગાંધીજીએ દૂરદર્શિતાથી આપ્યો હતો તે દેશ નિર્માણમાં મહત્વનો પુરવાર થશે.

અસહકાર ટાણે ગાંધીજીએ સરકારી શિક્ષણ સંસ્થાઓના બહિષ્કારના વિકલ્પ તરીકે કાશી વિદ્યાપીઠ, બનારસ વિદ્યાપીઠ, બિહાર વિદ્યાપીઠ, બંગાળ નેશનલ યુનિવર્સિટી, જામિયા મિલિયા દિલ્હી, નેશનલ મુસ્લિમ યુનિવર્સિટી અલીગઢ, ટિળક મહારાજ વિદ્યાપીઠ, નેશનલ કૉલેજ લાહોર સાથે ગૂજરાત વિદ્યાપીઠ અમદાવાદની સ્થાપના કરી.

વિદ્યાપીઠોનું ધ્યેય સ્વરાજ પ્રાપ્તિ માટે કેળવણી દ્વારા ચારિત્રવાન, શક્તિ સંપન્ન તથા કર્તવ્યનિષ્ઠ કાર્યકર્તાઓ તૈયાર કરવાનું સાથે ગ્રામકેન્દ્રોની પ્રવૃત્તિ દ્વારા ગામડાંઓની પ્રજાનું ઘડતર અને તેમનામાં જાગૃતિ લાવવા ઉપરાંત રચનાત્મક કાર્ય દ્વારા સ્વરાજ્ય પ્રાપ્તિનું હતું.

૧૯૨૦ના ઓગસ્ટમાં અમદાવાદમાં ચોથી ગુજરાત પરિષદે ઠરાવ કર્યો. આમ ગૂજરાત વિદ્યાપીઠની સ્થાપનાનું નિમિત્ત ગુજરાત રાજકીય પરિષદ બની અને આમ દેશની શિક્ષણનીતિ પરથી બ્રિટિશ રાજકીય અંકુશ દૂર કરવા રાષ્ટ્રીય

શિક્ષણ સમિતિની રચના કરવામાં આવી. એ રીતે ગુજરાત રાજકીય પરિષદે ગાંધીજીની યોજનાને ટેકો આપ્યો. જેનો કાર્યભાર વલ્લભભાઈ પટેલ પર હતો. જ્યારે રાષ્ટ્રીય શિક્ષણ સમિતિના પ્રમુખ ગાંધીજી હતા.

ગાંધીજીના આ કાર્યને વલ્લભભાઈ પટેલે એટલી ત્વરાથી ઉપાડ્યું કે ગુજરાતની શિક્ષણ સમિતિના નેજા હેઠળ નવી રાષ્ટ્રીય વિદ્યાપીઠોમાં ગૂજરાત વિદ્યાપીઠ સૌ પ્રથમ સ્થપાઈ.

ગૂજરાત વિદ્યાપીઠની ૧૮-૧૦-૧૯૨૦ના સ્થાપના થઈ. પરંતુ તેનો સ્થાપનાનો સમારંભ ૧૫-૧૧-૧૯૨૦ના રોજ ગુજરાત મહાવિદ્યાલયની શરૂઆતના દિવસે ગાંધીજીના હાથે વિદ્યાપીઠનો સ્થાપનાનો સમારંભ યોજાયો. મહાત્મા ગાંધીજીના જીવનના અનેક મહત્વપૂર્ણ કાર્યોમાં આ એક ખૂબ મહત્વનું કાર્ય હતું.

આમ ગાંધીજીએ ગૂજરાત વિદ્યાપીઠની સ્થાપના કરી તે સાચું પણ તેને લાડકોડથી ઉછેરવાનું, એક વાલી તરીકેનું કાર્ય વલ્લભભાઈએ ઉપાડી લીધું હતું.

2. Svaraj Ashram Bardoli.

૨.સ્વરાજ આશ્રમ બારડોલી.

ગુજરાતનો બારડોલી તાલુકો બારડોલી સત્યાગ્રહ અને તેમાં સરદારશ્રીના નેતૃત્વથી વધુ ખ્યાતી પામ્યો અને અમર બન્યો છે. આ એજ સત્યાગ્રહ હતો જેણે વલ્લભભાઈ પટેલને રાષ્ટ્રીય નેતા અને સરદાર બનાવ્યા.

જો કે અસહકારના આંદોલનમાં આ પ્રદેશે પણ આગળ પડતો ભાગ લીધો. ગાંધીજીએ પાટવી કુંવરની ભારતયાત્રાનો(૧૯૨૧) બહિષ્કાર કરવા કોઈ એક ચોક્કસ વિસ્તારમાં અસહકારની સામૂહિક ચળવળ શરૂ કરી કરવેરા ભરવાનો બહિષ્કાર કરવા બે નિર્ણયો કર્યા. ૧૯૧૮માં નાકરની લડત મોકૂફ રાખેલ તે આ વખતે ઉપાડવા ધાર્યું અને તે વાસ્તે સુરત જિલ્લાના બારડોલી તાલુકાને પસંદ કરવામાં આવ્યો.

આમતો નાકરની લડત માટે બે તાલુકા આગેવાની દાવેદાર હતા. એક આણંદ તાલુકો અને બીજો બારડોલી. પણ અંતે બારડોલીની પસંદગી ત્યાંના કાર્યકર્તાઓની કામગીરી અને ઉત્સાહ જોતાં થઈ. જેમાં મુરબ્બી શ્રી કુંવરજીભાઈ મહેતાનો ફાળો વિશેષ હતો. તેમણે જે ધગશથી બારડોલીને નાકર માટે ગાંધીજીની ચાર શરતો પ્રમાણે તૈયાર કર્યો હતો તે તેની પસંદગીનું મૂળ કારણ હતું.

કુંવરજીભાઈ અને તેમના સાથીદારોના પ્રયાસોથી આ કામ માટે બારડોલીમાં એક ભાડાના મકાનમાં સ્વરાજ્ય આશ્રમ શરૂ કરવામાં આવ્યો. દારૂ-તાડી છોડાવતી સ્વયંસેવકોની એક ટૂકડીના આગેવાન મકનજી માસ્તરની ભજનમંડળી પર જહાંગીર નામના પીઠાવાળાએ હુમલો કર્યો. આ પ્રસંગનું સમાધાન કરાવવા વાસ્તે અમદાવાદથી વલ્લભભાઈ પટેલને બારડોલી તેડાવવામાં આવ્યા. વરાડમાં વલ્લભભાઈ પટેલની જાહેર સભા યોજાઈ. વલ્લભભાઈએ જહાંગીરની ઝાટકણી કાઢી શિખામણનાં વેણ કહ્યાં. મકનજી માસ્તરને બિરદાવી તેમને વંદન કર્યા. આ કરપીણ ઘટનાને તેમણે પાશેરામાં પૂણી

ગણાવી આથીએ ભારે જોખમો નાકરની લડતમાં પ્રજાએ ગાંધી માર્ગે ઉપાડવાં પડશે તેવો ગર્ભીત સંકેત પણ આપ્યો.

સત્યાગ્રહી કદી વિરોધીનું અહિત ઈચ્છે નહીં તેવાં ગાંધીજીના સિદ્ધાંતને અહીં વલ્લભભાઈ પ્રસ્થાપિત કર્યો. જહાંગીર પીઠાવાળાએ સત્યાગ્રહી ખેડૂતોના સરકારી હરાજીમાં મફતના ભાવે ભાતના કુંદવા ખરીદી ફરી ઉદ્ધતાઈ અને નફ્ફટાઈ કરી ત્યારે વલ્લભભાઈ ખૂબ ગુસ્સે ભરાયા હતા. નફ્ફટ માણસ પ્રત્યે વલ્લભભાઈ પટેલ ઉદાર ન થઈ શકતા. આ પ્રસંગ પણ કુંવરજીભાઈ મહેતાએ નોંધ્યો છે.

વિઠ્ઠલભાઈ પટેલના બારડોલીના અહેવાલથી પણ નાકરની લડત માટે બારડોલી તાલુકો તૈયાર હતો તેવી ખાતરી ગાંધીજીને થઈ હતી અને આમ નાકરની લડત બારડોલીમાં શરૂ થાય તે પહેલાં જ ઉત્તરપ્રદેશના ગોરખપુર જિલ્લાના ચૌરીચૌરા ગામની હિંસક ઘટનાથી ગાંધીજીએ અસહકારનું આંદોલન મોકૂફ રાખ્યું સાથે બારડોલીની નાકરની લડત પણ મોકૂફ રાખી. લોકોને સત્ય-અહિંસાના માર્ગે તૈયાર કરવા ગાંધીજીએ કાર્યકર્તાઓને રચનાત્મક કાર્યક્રમ ઉપાડી લેવા આહવાન કર્યું ને આ કામ તેમના કાર્યકર્તાઓ સાથે વલ્લભભાઈ પટેલે પણ સ્વીકારી લીધું.

કુંવરજીભાઈના પ્રયાસોથી વલ્લભભાઈ પટેલ અને કસ્તુરબાની અધ્યક્ષતામાં નવસારીના શેખપુર ગામમાં પ્રથમ રાનીપરજ પરિષદ મળી. તેમાં પ્રથમ કસ્તુરબાએ વ્યાખ્યાન કર્યું. વલ્લભભાઈએ ભાષણ કર્યું હતું. આમ વ્યસનો દૂર થતાં અને જાગૃતિ આવતાં આદિવાસીઓ સમૃદ્ધ થવા લાગ્યાં. આમ, જંગલમાં નિવાસ કરતી આ પ્રજામાં ગાંધીજીના આદર્શોનું સિંચન કરવામાં અને રાષ્ટ્રીય લડતોમાં તેમના પાસે યોગદાન દેવડાવવામાં કાકાસાહેબ કાલેલકર, વલ્લભભાઈ પટેલ, દયાળજીભાઈ, કુંવરજીભાઈ મહેતા સાથે તેમના બારડોલી સ્વરાજ આશ્રમનો ફાળો વિશેષ રહ્યો.

અસહકાર વેળાએ નાકર માટે બારડોલીને પસંદ કરવામાં આવ્યો પણ તે મોકૂફ રહ્યો. પરંતુ સ્વરાજ વાસ્તે પ્રજા જાગૃતિ અર્થે ગાંધીજી અને વલ્લભભાઈ પટેલે તેમના કાર્યકર્તાઓ મારફત અહીંના પ્રદેશમાં રચનાત્મક કાર્યો ઉપાડ્યા હતા. પ્રારંભમાં સ્વરાજ આશ્રમ ભાડાના મકાનમાં શરૂ થયેલો. દક્ષિણ ગુજરાતમાં સ્વરાજ અને રચનાત્મક કાર્યો દ્વારા લોક જાગૃતિ માટે મઢી, વેડછી, સરભોણ વગેરે આશ્રમોની શ્રુંખલા સર્જાઈ. તેમાં વલ્લભભાઈની પ્રેરણાથી બારડોલી આશ્રમની સ્થાપના કરવામાં આવી. જૂનો આશ્રમ પોસ્ટ ઓફિસના મકાનમાં હતો. જે "જૂના આશ્રમ" તરીકે જાણીતો હતો. કુંવરજીભાઈએ પોસ્ટ ઓફિસ પાસે અપાસરામાં સ્વરાજ્ય આશ્રમ શરૂ કર્યો. તેનું ઉદ્‌ઘાટન દરબાર સાહેબે કરેલું હોઈ તે "દરબાર ગઢ" કહેવાતો. સને ૧૯૨૧-૨૨માં આશ્રમનાં મકાનો બંધાયાં તથા ૧૯૨૨ સુધી કુંવરજીભાઈ આશ્રમના પ્રમુખ તરીકે કાર્યરત રહ્યા. ૧૯૨૫માં સ્વરાજ આશ્રમ માટે ટ્રસ્ટી મંડળ સ્થાપવાનો વિચાર કરી મંડળ સ્થપાયું ને ગુજરાત પ્રાંતિક સમિતિના પ્રમુખ વલ્લભભાઈ પટેલ બારડોલી આશ્રમના સંચાલક મંડળના પ્રમુખ થયા. આગળ ચાલતાં ગાંધીજી અને વલ્લભભાઈ પટેલના માર્ગદર્શન હેઠળ આશ્રમનું વિધિસર ટ્રસ્ટ બન્યું અને તેના પ્રથમ પ્રમુખ વલ્લભભાઈ પટેલ બન્યા હતા. આમ, અસહકારમાંથી જેમ વિદ્યાપીઠ જન્મી તેમ સ્વરાજ્ય આશ્રમ બારડોલીનો પણ ઉદ્‌ભવ થયો તેમ આપણે કહી

શકીએ.

અસહકાર આંદોલનની મોકૂફી બાદ આશ્રમ વાસ્તે પાંચ વિઘા જમીન ખરીદવામાં આવી. આશ્રમનો અને વણાટશાળાનો પાયો વલ્લભભાઈ પટેલ અને ગોપાળદાસ દેસાઈ (દરબાર સાહેબ)ના હાથે નંખાયો હતો. આશ્રમનાં મકાનો બાંધવા માટે ખુશાલભાઈ, કુંવરજીભાઈ, કલ્યાણજીભાઈ, નરહરિ પરીખ, મગનલાલ ગાંધી વગેરે ઉપરાંત ગાંધીજી અને વલ્લભભાઈ પટેલે પણ ફંડ એકત્રિત કરવાનું કામ કર્યું હતું. આશ્રમનું પુનઃ બાંધકામ વલ્લભભાઈ પટેલની દેખરેખમાં થયું. જેમાં કરકસર કરવા છતાં બે માળનું મકાન બાંધતાં ૪૦,૦૦૦/- ખર્ચ થયો હતો. વળી, ખુશાલભાઈ તો છેક દક્ષિણ આફ્રિકા આશ્રમના બાંધકામ વાસ્તે ફાળા માટે ગયા હતા ને પિસ્તાળીસ હજાર જેટલો ફંડફાળો લઈ આવ્યા હતા. આમ, સ્વરાજ આશ્રમના નિર્માણમાં વલ્લભભાઈ પટેલ અને તેમના મુખ્ય કાર્યકર્તાઓ ખુશાલભાઈ, કુંવરજીભાઈ વગેરેનો સિંહફાળો હતો.

વળી, ૧૯૨૮ના બારડોલી સત્યાગ્રહ વખતે સત્યાગ્રહીઓને રહેવા માટે બાર એકર જમીન ખરીદી. જેમાં કાર્યાલય, કાર્યકર્તાનિવાસ, મહેમાનોના નિવાસસ્થાન અને ડેલો બંધાયાં હતાં. આમ, ૧૯૨૧ થી ૧૯૨૮ સુધી આશ્રમની ભૂમિકા બદલાતી રહી અને બારડોલી સ્વરાજ આશ્રમ આઝાદીની લડતનું કેન્દ્ર બન્યો હતો. જે અનેક રાષ્ટ્રનેતાઓની ચરણરજથી પુનિત થયો.

આશ્રમમાંનું સરદાર પટેલનું નિવાસસ્થાન વાંકાનેરના સુથારભાઈએ બાંધ્યું હતું. જે 'બંગલા'ના હુલામણા નામે જાણીતું હતું. બારડોલી સત્યાગ્રહ સમયે સરદાર પટેલનો અહીં મુકામ હતો. તે છેક સને ૧૯૪૨ સુધી ઉનાળામાં તેઓશ્રી અહીં અવારનવાર આવી રહેતા. મોટે ભાગે અમદાવાદ રહેતા. સને ૧૯૫૦માં સરદારશ્રીએ આશ્રમની છેલ્લી મુલાકાત લીધેલી ત્યારે ઉત્તમચંદ શાહને આશ્રમની સોંપણી કરતાં કહેલું, "ઉત્તમચંદ, આ આશ્રમ ભારતના સ્વાતંત્ર્ય સંગ્રામનું ઐતિહાસિક સ્થળ છે. ભવિષ્યમાં તે તીર્થસ્થાન બનવાનું છે, માટે તેને સાચવજો." ઉત્તમચંદ શાહે પણ તે જવાબદારી ઉત્તમ રીતે નિભાવી સ્વરાજ્ય આશ્રમને બરાબર વિકસાવ્યો અને અનેકવિધ રચનાત્મક પ્રવૃત્તિથી ભરી દીધો.

આશ્રમની ખેતીવાડી અને બગીચો સરદારશ્રીનો રસનો વિષય હતો. તેની સતત તે માવજત લેતા. અનેક પ્રકારનાં વૃક્ષો વાવેલાં. તાજાં શાકભાજી મળે તે માટે તેનું વાવેતર કરાવતા. સૂરણનું શાક તેમને ખૂબ પ્રિય હતું. ભાજીપાલાના ક્યારા તો હરહંમેશ ભરેલા જ રહેતા. આમ, સ્વરાજ આશ્રમની વાડી-બગીચો એમનું હરિયાળું સ્મારક છે. આશ્રમમાં ગાંધીજીના મુકામ અને દેશના બીજા નેતાઓ, કાર્યકર્તાઓ આગમન વાસ્તે ભરપુર તૈયારી સરદાર પટેલ કરાવતા ને તેમાં કોઈ ખોટ ન રહી જાય તેની તકેદારી લેવા આશ્રમના મંત્રી અને કાર્યકરોને કહેતા. મહાત્મા ગાંધીજી અને તેમની પાછળ દેશના આગેવાન નેતાઓનો મુકામ સ્વરાજ્ય આશ્રમમાં થતો ત્યારે જવાહરલાલથી માંડીને અબ્દુલ ગફારખાન સુધીના ક્યા નેતાને ચા-કૉફી,

નાસ્તા અને જમવામાં શું મળે તો તેઓ રાજી થાય તેની ઝીણામાંઝીણી જરૂરિયાતોનો ખ્યાલ સરદાર વલ્લભભાઈ પટેલને હતો. તેની માહિતી તેઓ આશ્રમના વ્યવસ્થાપકોને આપતા. સવારે ચાર વાગ્યે પૂજ્ય ગાંધીજીની પ્રાર્થના પછીનો આખા દિવસ માટેના કાર્યક્રમનું ઝીણવટથી સૂચન તેઓ આપી દેતા.

બારડોલીના આંગણે આખા દેશમાંથી આગેવાનો આવે અને ઐતિહાસિક મંત્રણાઓ ચાલે, વર્કિંગ કમિટી A.I.C.C.ની બેઠકો અહીં થતી. હરિપુરા કોંગ્રેસ અધિવેશન ટાણે સરદાર વલ્લભભાઈ પટેલે બારડોલી પાસે જે વ્યવસ્થા કરાવી હતી. તે એક ગામડામાં આવી વ્યવસ્થા ભારતીય ઈતિહાસમાં પહેલવહેલી હતી. આમ, સ્વરાજ આશ્રમ બારડોલી સરદાર પટેલને ઘણો પ્રિય હતો. પૂરા છ મહિના બારડોલીની પ્રજાએ સરદારશ્રીના નેતૃત્વમાં બ્રિટિશ સામ્રાજ્યને હરાવી આ સ્થાનને ઐતિહાસિક જગ્યા બનાવી દીધી હતી.

3. Vallabh Vidyalaya Bochasana.

૩. વલ્લભ વિદ્યાલય બોચાસણ.

અસહકારની સામુદાયિક ચળવળ ટાણે રાષ્ટ્રીય શિક્ષણ વાસ્તે ગૂજરાત વિદ્યાપીઠની સ્થાપના થઈ હતી. આ વિદ્યાપીઠનું કાર્યક્ષેત્ર ગામડાંની પ્રજામાં રચનાત્મક કાર્યક્રમો દ્વારા જાગૃતિ લાવી પ્રજાને સ્વરાજ માટે લાયક બનાવવા અને જીવનમાં પરિવર્તન લાવવાના ઉદ્દેશ્ય સાથે ગ્રામ કેન્દ્ર શરૂ કરી તેનો વિકાસ કરવા પર ધ્યાન કેન્દ્રિત કરવામાં આવ્યું. આવા જ એક ગ્રામસેવા કેન્દ્ર તરીકે વિદ્યાપીઠ દ્વારા ૬-૫-૧૯૩૧માં ગાંધીજીના હસ્તે "વલ્લભ વિદ્યાલય બોચાસણ"ની સ્થાપના કરવામાં આવી. આ સંસ્થાના વિચારથી, તેના પાયાથી લઈ તે પોતાના જીવનની અંતિમ ઘડી સુધી વલ્લભભાઈ પટેલે તેને સતત માર્ગદર્શન અને હુંફ પુરાં પાડ્યાં હતાં.

બોચાસણમાં સરદારશ્રીના પ્રયાસોથી જ વલ્લભ વિદ્યાલય અસ્તિત્વમાં આવ્યું હતું. આ સંસ્થાનો પાયો જ અસહકાર, સત્યાગ્રહ, જીવન ઘડતર, નવનિર્માણ તથા કેળવણી વડે સમાજ પરિવર્તનના ઉમદા હેતુથી થયો. આ સંસ્થા શિક્ષણની એક પ્રયોગશાળા સમાન બની રહી. જેણે ગાંધી વિચારોને પોતાના દ્રષ્ટિસમક્ષ રાખ્યા.

ખેડા જિલ્લો નાકરની લડતમાં જોડાયો. તેમાં બોચાસણ ગામે પણ ઝંપલાવ્યુ હતું. તેઓ વડોદરા રાજ્યની સીમાના ગામ રુંડેલની સીમમાં માંડવા બાંધી રહેતા. ત્યારે ગૂજરાત વિદ્યાપીઠના શ્રી શામળભાઈ પટેલના નેતૃત્વમાં વિદ્યાપીઠના વિદ્યાર્થીઓએ ગામવાસીઓના બાળકોના અભ્યાસ માટે કેમ્પ લગાવ્યો હતો. ગંગા બહેન વૈદ્યની આગેવાની હેઠળ 'ઉદ્યોગમંદિર' ચલાવાતું. વિદ્યાપીઠની આ પ્રવૃત્તિઓમાંથી જ વલ્લભ વિદ્યાલયનું બી વવાયું. તેથી આ વિદ્યાલયમાં રાષ્ટ્રીય ઉદ્યોગને મુખ્ય સ્થાન આપવામાં આવ્યું હતું.

બોરસદ સત્યાગ્રહ સમયે સરદાર વલ્લભભાઈ પટેલ અહીંની બારૈયા, પાટણવાડિયા કોમથી પરિચિત થયા

હતા. વળી સરકારી ચોપડે આ કોમ "ક્રિમિનલ ટ્રાઈબ્ઝ" તરીકે ઓળખાતી તે સરકારી ચોપડેથી ગુનાહિત કોમમાંથી તેમને કાઢી નાંખવામાં સરદાર પટેલે કામ કર્યું. તેમનામાં સુધાર કરવાની, શિક્ષણનો પ્રચાર કરવાની જરૂરિયાત સરદાર પટેલને લાગી હતી. સને ૧૯૩૧માં લડત સંકેલાતાં બોચાસણવાસીઓ પોતાના ઘરે પાછા ફર્યા ત્યારે શ્રી શામળભાઈ પટેલ અને સાબરમતી આશ્રમની બહેનોને ગ્રામવાસીઓ પોતાની પ્રવૃત્તિઓ ત્યાં ચાલુ રાખવા અનુરોધ કરતાં શ્રી શામળભાઈએ વિદ્યાપીઠના આચાર્ય કાકાસાહેબ કાલેલકરને તેની જાણ કરી. વળી ગ્રામસેવા માટે શ્રી નગીનદાસ અમુલખરાયે મહાત્માજીને એક લાખનું દાન આપ્યું હતું. જે વિદ્યાપીઠને મળ્યું હતું અને વિદ્યાપીઠે આવા દાનના ઉપયોગ માટે એક ત્રણ સભ્યોની ગ્રામસેવા સમિતિ નીમી હતી. જેમાં સરદાર વલ્લભભાઈ પટેલ, મહાદેવભાઈ દેસાઈ અને નરહરિભાઈ પરીખ તેના સભ્યો હતા. આ સમિતિ આગળ કાકાસાહેબની બોચાસણની રજૂઆત મૂકવામાં આવી. જે માન્ય રાખવામાં આવી અને ૯ મે, ૧૯૩૧ના રોજ ગાંધીજીના વરદ હસ્તે વલ્લભ વિદ્યાલયનો પાયો નાંખવામાં આવ્યો હતો. આ પ્રસંગે ગાંધીજીએ વિદ્યાલયના નામ 'વલ્લભ' શબ્દનો મર્મ પણ સમજાવ્યો હતો. આમ, બોચાસણ વલ્લભ વિદ્યાલયની સ્થાપના ત્યાંની પછાત કોમોના બાળકો વાસ્તે કરવામાં આવ્યો હતો.

બોચાસણના વિદ્યાલયને 'વલ્લભ' નામ કાકાસાહેબ કાલેલકરે આપ્યું હતું. આ ગ્રામસેવા કેન્દ્રને પછાત વર્ગના બાળકોને કેળવણી વડે તેમનું સર્વાંગી વિકાસ કરવાની મોટી જવાબદારી સોંપવામાં આવી હતી.

આ સંસ્થાને શરૂઆતથી જ મહાપુરુષોનું માર્ગદર્શન મળ્યું અને તે સાથે ઈ.સ. ૧૯૩૧ના જૂનથી ગામે આપેલ એક વીઘા જમીનમાં વાંસ, લાકડા અને માટીના મકાનો બનાવી સામાજિક અને ઔધોગિક પ્રવૃત્તિઓ થકી શ્રમાભિમુખ કેળવણીની શરૂઆત થઈ. ગાંધીજી, સરદાર પટેલ, ગંગાબહેન વૈદ્ય, રવિશંકર મહારાજ વગેરેનું બહુમૂલ્ય માર્ગદર્શન આ સંસ્થાને મળ્યું.

સ્વાતંત્ર્ય પ્રાપ્તિની લડત પુરજોશમાં ચાલતી હતી તે વેળાએ વલ્લભ વિદ્યાલયે પણ તેમાં જંપલાવ્યું. જેથી ઈ.સ.૧૯૩૨ થી ૧૯૩૫ સુધી આ સંસ્થાને સરકારે જપ્ત કરી હતી. ઈ.સ. ૧૯૩૫થી આ વિદ્યાલય પુનઃ ચાલુ થયું હતું. સરદાર પટેલે આ વિદ્યાલયની જવાબદારી વિદ્યાપીઠના શ્રી શીવાભાઈ ગો. પટેલને સોંપી. ગાંધીજીના સૂચન પ્રમાણે તેમણે વિદ્યાલયની પ્રવૃત્તિઓ ગોઠવી અને તમામ કામ વિદ્યાર્થી-શિક્ષકોએ જાતે કરવાના હતા. આટલા વર્ષોએ આજે પણ આ વિદ્યાલયના મોટાભાગના કામો વિદ્યાર્થી-શિક્ષકો જાતે કરે છે તે નોંધપાત્ર છે.

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Why Organizations need to Communicate Effectively During Crises

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Crisis Management - Meaning, Need and its Features

What is Crisis ?

A sudden and unexpected event leading to major unrest amongst the individuals at the workplace is called as organization crisis. In other words, crisis is defined as any emergency situation which disturbs the employees as well as leads to instability in the organization. Crisis affects an individual, group, organization or society on the whole.

Characteristics of Crisis

- Crisis is a sequence of sudden disturbing events harming the organization.
- Crisis generally arises on a short notice.
- Crisis triggers a feeling of fear and threat amongst the individuals.

Why Crisis ?

Crisis can arise in an organization due to any of the following reasons:

- Technological failure and Breakdown of machines lead to crisis. Problems in internet, corruption in the software, errors in passwords all result in crisis.
- Crisis arises when employees do not agree to each other and fight amongst themselves. Crisis arises as a result of boycott, strikes for indefinite periods, disputes and so on.
- Violence, thefts and terrorism at the workplace result in organization crisis.
- Neglecting minor issues in the beginning can lead to major crisis and a situation of uncertainty at the work place. The management must have complete control on its employees and should not adopt a casual attitude at work.
- Illegal behaviors such as accepting bribes, frauds, data or information tampering all lead to organization crisis.

- Crisis arises when organization fails to pay its creditors and declares itself a bankrupt organization.

Crisis Management

The art of dealing with sudden and unexpected events which disturbs the employees, organization as well as external clients refers to Crisis Management.

The process of handling unexpected and sudden changes in organization culture is called as crisis management.

Need for Crisis Management

- Crisis Management prepares the individuals to face unexpected developments and adverse conditions in the organization with courage and determination.
- Employees adjust well to the sudden changes in the organization.
- Employees can understand and analyze the causes of crisis and cope with it in the best possible way.
- Crisis Management helps the managers to devise strategies to come out of uncertain conditions and also decide on the future course of action.
- Crisis Management helps the managers to feel the early signs of crisis, warn the employees against the aftermaths and take necessary precautions for the same.

Essential Features of Crisis Management

- Crisis Management includes activities and processes which help the managers as well as employees to analyze and understand events which might lead to crisis and uncertainty in the organization.
- Crisis Management enables the managers and employees to respond effectively to changes in the organization culture.
- It consists of effective coordination amongst the departments to overcome emergency situations.
- Employees at the time of crisis must communicate effectively with each other and try their level best to overcome tough times.

Points to keep in mind during crisis

- Don't panic or spread rumours around. Be patient.
- At the time of crisis the management should be in regular touch with the employees, external clients, stake holders as well as media.
- Avoid being too rigid. One should adapt well to changes and new situations.

Many people think that corporate communication is all about glitzy press conferences in plush hotels and the hosting as well as the wining and dining of media personnel and associated stakeholders.

However, there is more to corporate communications than coming up with glossy annual reports or pithy press releases. For instance, the real mettle of the corporate communications team is tested whenever organizations face crises and the way in which the well oiled machinery of the corporate communications department or function responds to urgent need for communications often determines how well the press and the public as well as governmental agencies perceive the organization's efforts in mitigating the crisis and the steps taken to address the crisis.

Let us take an example here. Say a prominent multinational or transnational organization has been found violating the land use or the water use agreements it has with the local and the national authorities.

Imagine how the media reacts once the scandal or the crisis breaks out and place yourself in the shoes of the organization when confronted by angry members of the public and the other stakeholders.

In this scenario, the most important aspect is the speed as well as the credibility of the response.

In other words, the organization has to first assess where it stands and then come up with a credible and authoritative response immediately so as to avoid "**stoking the fires**" of the simmering issue.

This has been the case with many organizations such as the TATA group and the American cola giants when they faced allegations of violating the land use and the water usage agreements that they had with the local and the national stakeholders.

In both these cases, the response was very credible and authoritative and pointed to the steps that the respective organization had taken to mitigate the crisis as well as the need for all stakeholders to be patient and not to resort to scaremongering and a "**trial by the media**".

The last phrase is very crucial since, in these days of 24/7 breaking news culture, it is often the case that the media in search of the next sensational news does not bother to fact check or even reach out to the relevant stakeholders and instead airs the content as it is.

This is where the corporate communications team in organizations can come into the picture as the senior members of the team must firs ensure that they talk to the organizational leadership, ascertain what needs to be done, draft a response that accurately represents their stance on the issue and then release the statement to the media.

Of course, as we shall discuss subsequently, this is not as simple as it sounds since it entails coordinating with various stakeholders within the organization as well as outside or external agencies such as the media houses and the governmental authorities before a statement can be issued.

For instance, whenever a crisis breaks, it is often the case that the organizational leaders themselves are unprepared or "**caught off guard**" by the sheer speed with which the frenetic and the frenzied media and public response erupts. So, the task of first ascertaining the facts lies with the leadership since most of the time, the escalations of problems on the ground do not always reach the top leadership.

To take an example, when the worst industrial disaster in history, the Bhopal Gas Leak incident happened in 1984, it was the case that there was no clear communication both top down as well as bottom up leading to all sorts of confusing and contradictory responses emerging in the immediate aftermath of the incident.

In 2014, when the Malaysian Airlines flight MH370 disappeared, for a few hours, almost all stakeholders were like "**blind men and the elephant**" that were guessing and speculating rather than arriving at a coherent and cohesive response to the public.

The point here is that in these days of Twitter and Social Media, *it is the anonymous public who often break the story as well as add details and are on the lookout for updates*. Therefore, unlike the earlier eras, the corporate communications team cannot afford to simply "**manage the media**" which in other terms means the print and visual media.

Instead, they now have to reckon with armies of social media users who often react with such alarming speed that would put traditional journalists to shame for the sheer agility and pace.

Therefore, not only does the corporate communications team during crises have to coordinate internally, but they also have to ensure that keep an eye on the social media feeds so that they can respond accordingly.

Another important aspect of crisis communication arises whenever there are fatalities or deaths and injuries to people.

For instance, whenever there is a terrorist attack, it is often the case that corporates come out with statements that assure and reassure the stakeholders about the safety or their employees as well in the unfortunate case of fatalities, quickly come up with a response detailing the steps that they are taking.

Indeed, it is during these times that the corporate communications team and the crisis communications model is tested for its humanitarian aspects as well as the organizational leadership placed in the spotlight for its commitment to the welfare of its employees.

Considering all these aspects, it is important to note that **effective communications during crises often determine how the organization is perceived**. Since the impressions and the perceptions in our "always on" digital culture are formed instantaneously, the imperatives of speed, accuracy and humaneness are what matters during crisis communications.

Cultivation of Horticultural Crops in Gujarat: Current Practices, Challenges, and Future Prospects

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Abstract

Gujarat, a state in western India, is known for its diverse horticultural crop production, which includes fruits, vegetables, flowers, and spices. This paper examines the current state of horticultural crop cultivation in Gujarat, analyzes the challenges faced by the sector, and discusses potential strategies for enhancing productivity and sustainability. By exploring the existing practices and identifying key areas for improvement, the paper provides recommendations for boosting the horticultural sector's growth in Gujarat.

1. Introduction

Gujarat, with its varied agro-climatic zones, has a significant potential for horticultural crop production. The state's horticultural sector plays a crucial role in its agricultural economy, contributing to food security, employment, and rural development. This paper provides an overview of the current practices in horticultural crop cultivation in Gujarat, highlights the challenges faced by the sector, and suggests strategies for future growth.

2. Overview of Horticultural Crops in Gujarat

2.1. Types of Horticultural Crops

Gujarat's horticultural sector includes a wide range of crops:

- **Fruits:** Mangoes, bananas, pomegranates, citrus fruits, and guavas are major fruit crops.
- **Vegetables:** Tomatoes, onions, potatoes, carrots, and beans are prominent vegetables grown.
- **Flowers:** Marigolds, roses, and gerberas are cultivated for both domestic and export markets.
- **Spices and Herbs:** Chilies, coriander, and turmeric are among the key spices and herbs grown.

2.2. Geographical Distribution

The cultivation of horticultural crops varies across Gujarat's distinct agro-climatic zones:

- **Saurashtra Region:** Known for its production of fruits like mangoes and pomegranates.
- **Kutch Region:** Suited for drought-resistant crops such as certain vegetables and spices.

- **South Gujarat:** Favored for its vegetable production due to favorable climatic conditions.

3. Current Practices in Horticultural Cultivation

3.1. Farming Techniques

- **Traditional Farming:** Many farmers use traditional methods, including rain-fed irrigation and manual labor. These practices are often less efficient but deeply rooted in local agricultural culture.
- **Modern Techniques:** The adoption of modern practices, such as drip irrigation, plastic mulching, and high-yielding varieties, is increasing. These techniques help improve water use efficiency and crop yields.

3.2. Pest and Disease Management

Integrated Pest Management (IPM) practices, including the use of biological control agents and organic pesticides, are employed to manage pests and diseases. However, the adoption of advanced pest management technologies is still limited in some areas.

3.3. Market Access and Supply Chain

The state has developed several markets and supply chain infrastructures, including cold storage facilities and processing units, to support horticultural crop producers. However, inefficiencies in logistics and market access remain a challenge for many farmers.

4. Challenges in Horticultural Crop Cultivation

4.1. Water Scarcity

Water scarcity is a significant challenge in Gujarat, affecting crop yields and production. While the state has invested in irrigation infrastructure, the efficient use of water resources remains a concern.

4.2. Soil Degradation

Soil degradation due to over-cultivation, erosion, and salinity affects horticultural productivity. Soil health management practices are needed to address these issues.

4.3. Pest and Disease Outbreaks

Pests and diseases continue to pose threats to horticultural crops. Despite efforts to control them, outbreaks can lead to substantial losses.

4.4. Climate Change

Climate change impacts, such as irregular rainfall patterns and extreme temperatures, affect crop yields and quality. Adapting to these changes requires research and the development of resilient crop varieties.

5. Government Initiatives and Support

5.1. Schemes and Policies

The Gujarat state government has implemented various schemes to support horticultural farmers, including:

- **Horticulture Mission for North East and Himalayan States (HMNEH):** Aims to enhance horticulture productivity.
- **National Horticulture Mission (NHM):** Focuses on improving infrastructure and providing financial support.
- **Soil Health Management (SHM):** Promotes soil health through various interventions.

5.2. Research and Development

The state government supports research and development initiatives through agricultural universities and research institutions. These efforts focus on developing new crop varieties, pest management techniques, and sustainable practices.

6. Future Prospects and Recommendations

6.1. Adoption of Sustainable Practices

Promoting sustainable agricultural practices, such as organic farming, conservation tillage, and agroforestry, can enhance soil health and water conservation.

6.2. Enhancing Water Management

Investing in advanced irrigation systems and promoting water-efficient practices can mitigate the impact of water scarcity. Rainwater harvesting and efficient water use technologies should be encouraged.

6.3. Strengthening Extension Services

Improving agricultural extension services to provide farmers with information on best practices, new technologies, and market opportunities is crucial for enhancing horticultural productivity.

6.4. Encouraging Value Addition

Developing value-added products, such as processed fruits and vegetables, can help increase farmers' income and reduce post-harvest losses.

6.5. Promoting Research and Innovation

Investing in research and innovation to develop climate-resilient crop varieties and advanced pest management techniques can help address the challenges posed by climate change and pests.

7. Conclusion

The cultivation of horticultural crops in Gujarat is a vital component of the state's agricultural sector, offering significant economic and nutritional benefits. While the sector faces challenges such as water scarcity, soil degradation, and climate change, there are opportunities for growth through the adoption of sustainable practices, improved infrastructure, and enhanced support systems. By addressing these challenges and leveraging existing initiatives, Gujarat can enhance its horticultural productivity and contribute to the overall development of the agricultural sector.

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This research paper provides an in-depth analysis of the cultivation of horticultural crops in Gujarat, addressing current practices, challenges, and strategies for future development. It aims to offer insights and recommendations to enhance the growth and sustainability of the horticultural sector in the state.

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