PREFACE

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കാലാവസ്ഥാ വ്യതിയാനം ഉയർത്തുന്ന സാമ്പത്തിക വെല്ലുവിളികൾ

പൂർണിമതാ ദാസ് ഗുപ്ത

എന്താണ് സാമ്പത്തിക വികസനമെന്ന് മനസ്സിലാക്കുന്നതിന് ധാരാളം സൈദ്ധാന്തിക വിശകലന പദ്ധതികളുണ്ട്. മാൽത്തൂഷ്യൻ, മാർക്സിയൻ തുടങ്ങി സ്റ്റിഗ്ളറ്റ്സ് കമ്മീഷൻ വരെയുള്ള ദാർശനിക നിരീക്ഷണങ്ങൾ സാമ്പത്തിക വികസനത്തെ നിർവ്വചിക്കുന്നുണ്ട്. ജനസംഖ്യ, മാനവശേഷി മൂലധനം, വിഭവസമ്പത്ത്സ അനുബന്ധ സ്ഥാപനങ്ങൾ, രാഷ്ട്രീയ സമ്പദ്ഘടന എന്നിവ സാമ്പത്തിക വികാസം മനസ്സിലാക്കുന്നതിനുള്ള മാനദണ്ഡങ്ങളാണ്.

സാമ്പത്തിക വളർച്ചയിൽ പ്രകൃതിയുടെ അനിഷേധ്യ പങ്കിനെ മനസ്സിലാക്കുന്നതിന് അനുകരണീയമായ നിരവധി സൂചനകൾ കാലാവസ്ഥാ വ്യതിയാനം നൽകുന്നുണ്ട്. കാലാവസ്ഥാ ശാസ്ത്രത്തെക്കുറിച്ചുള്ള കൂടുതൽ ധാരണകളും അഭിപ്രായ സമന്വയവും ശാസ്ത്രജ്ഞന്മാർക്കിടയിൽ സൃഷ്ടിക്കുന്നതിന് ആഗോളതാപനം ഹേതുവായിട്ടുണ്ട്. ഇതാകട്ടെ, കേവല സാമ്പത്തിക വികസനത്തിൽ നിന്നും സന്തുലിത വികസനത്തിലേക്ക് ശ്രദ്ധ തിരിക്കാനുള്ള വഴിയൊരുക്കുകയും ചെയ്തു.

സന്തുലിത വികസനം എന്ന സംജ്ഞ വ്യാപകമായി ഉപയോഗിക്കാൻ തുടങ്ങിയത് UNDPയുടെ 1995 ലെ വികസന രേഖ പുറത്തുവന്നതോടെയാണ്. ഭാവിതലമുറയെ ബാധിക്കാത്ത തരത്തിൽ പ്രകൃതി സമ്പത്തിന്റെ ഉപഭോഗവും സംരക്ഷണവും ഉറപ്പാക്കി വേണം വർത്തമാനകാല ആവശ്യങ്ങളെ നേരിടുവാൻ എന്ന് 2015 ലെ യു.എൻ സന്തുലിത വികസന രേഖ ആഹ്വാനം ചെയ്യുന്നു. കാലാവസ്ഥ മാറ്റവും അതിന്റെ പ്രത്യാഘാതങ്ങളെ നേരിടുന്നതിനുള്ള മാർഗങ്ങളും സംബന്ധിച്ച് പ്രസ്തു രേഖ ഉചിതമായ ചില വ്യവസ്ഥകൾ മുന്നോട്ട് വെയ്ക്കുന്നു.

ഒന്നാമതായി, കാലാവസ്ഥാ വ്യതിയാനത്തെ മറി കടന്ന് പൂർവസ്ഥിതി പ്രാപിക്കുവാനും പരിത സ്ഥിതികളുമായി പൊരുത്തപ്പെടാനുമുള്ള ശേഷി ലോകത്തെല്ലായിടത്തും വർദ്ധിപ്പിക്കുക എന്നതാണ്. മനുഷ്യ സമൂഹത്തിന്റെ പുരോഗതിയും നന്മയും മാനദണ്ഡമാക്കിയുള്ള ചിന്തയിൽ വേണം ഇതിന്റെ നിർവഹന പദ്ധതികൾ രൂപ കൽപ്പന ചെയ്യേണ്ടത്.

IPCCയുടെ ഏറ്റവും പുതിയ റിപ്പോർട്ട് പ്രകാരം ലോകത്തിന്റെ എല്ലാ പ്രദേശങ്ങളിലും കാലാവസ്ഥാ വ്യതിയാനത്തിന്റെ പ്രത്യാഘാതങ്ങളെപ്പറ്റിയുള്ള ആകുലതകൾ വ്യാപകമാണ്. തിക്താനുഭവങ്ങളുണ്ടാകുന്ന ജനവിഭാഗങ്ങളിലും ആവാസ വ്യവസ്ഥകളിലും ഈ പ്രശ്നം ഉയർന്ന തോതിൽ പ്രതികൂലമായിത്തീർന്നേക്കാം. ഗ്രാമീണ മേഖലയിൽ പ്രകൃതി വിഭവങ്ങളെ മാത്രം ജീവനോപാധിയാക്കിയിരുന്ന പാവപ്പെട്ടവർ, ദുർബലമായ ആവാസ വ്യവസ്ഥയിലെ ചില ജീവവർഗങ്ങൾ എന്നിവരെയാണ് ഇത് പെട്ടന്ന് ബാധിക്കുക. ഉദാഹരണത്തിന് പവിഴപ്പുറ്റ് ഉള്ള പ്രദേശങ്ങളിൽ ഒരു ഡിഗ്രി സെൽഷ്യസ് ചൂട് വർദ്ധിച്ചാൽ പോലും അപകട സാധ്യത വളരെ കൂടുതലാകും. രണ്ട് ഡിഗ്രി സെൽഷ്യസ് വരെ ചൂടുണ്ടായാൽ വിളയുൽപ്പാദനത്തിൽ വർധനയുണ്ടാകില്ല.

ഏഷ്യയിലുണ്ടായേക്കാവുന്ന മൂന്ന് തരം കെടുതികൾ തിരിച്ചറിഞ്ഞ് തിട്ടപ്പെടുത്തിയിട്ടുണ്ട്. വെള്ളപ്പൊക്കം മൂലമുണ്ടാകുന്ന അടിസ്ഥാന സൗകര്യങ്ങളുടെ തകർച്ച, ജീവനോപാധികളുടെയും വാസസ്ഥലങ്ങളുടെയും നാശനഷ്ടങ്ങൾ, അമിതമായ വരൾച്ച മുഖാന്തരമുള്ള ജീവഹാനി, ഭക്ഷണ പാനീയങ്ങളുടെ കുറവ് എന്നിവയാണവ. ഇപ്പോൾ ചൂണ്ടിക്കാണിച്ചിരിക്കുന്ന ചില പ്രത്യാഘാതങ്ങൾ 2040 ഓടെ ഉണ്ടായേക്കാമെന്നാണ് സൂചന. മറ്റുള്ളവ 2100-മാണ്ടോടെയും. വെള്ളപ്പൊക്ക കെടുതികളും അനുബന്ധ നാശങ്ങളും നേരിടേണ്ടിവരുന്ന 20 രാജ്യങ്ങളിൽ ഇന്ത്യയും ഉൾപ്പെടുന്നു. ഇവിടുത്തെ 80 ശതമാനം ജനങ്ങളെയും ഇത് ബാധിക്കാൻ സാധ്യതയുണ്ട്. സമുദ്ര നിരപ്പിൽ നിന്നും ഏറെ അകലെയല്ലാത്ത കൊൽക്കത്ത, മുംബൈ നഗരങ്ങളിൽ - ഏറ്റവും ജനസാന്ദ്രതയും സ്വത്തും ഉൾക്കൊള്ളുന്ന - അപകടസാധ്യത ഏറെയാണ്. അദ്ധ്വാനശേഷിയുടെ ഉത്പാദനത്തെയും വളരെ ദോഷകരമായും ക്രമാതീതമായുമുണ്ടാകുന്ന ചൂട് ബാധിക്കും. നിർമ്മാണ മേഖലയിലും കാർഷിക മേഖലയിലും പണിയെടുക്കേണ്ടിവരുന്ന തൊഴിലാളികൾക്ക് സൂര്യാഘാതമേൽക്കാനുള്ള സാധ്യത കൂടുതലാണ്. കടൽത്തീരം, പർവത മേഖല തുടങ്ങിയ വിനോദസഞ്ചാര കേന്ദ്രങ്ങളുടെ സാമ്പത്തിക വ്യവഹാരങ്ങളെ ഇത് സാരമായി ബാധിക്കും. മലേറിയ, വയറിളക്കം തുടങ്ങിയ രോഗങ്ങളും മറ്റ് ആരോഗ്യ പ്രശ്നങ്ങളും വർദ്ധിക്കും.

പ്രതിരോധശേഷിക്കുറവ്, പ്രകൃതി വിഭവാധിഷ്ഠിത ഉപജീവനം, കാർഷിക മേഖലയുടെ തകർച്ച എന്നിവ കാലാവസ്ഥാ വ്യതിയാനം മൂലമുണ്ടാകുന്ന സാമ്പത്തിക പ്രതിസന്ധികൾ സൃഷ്ടിക്കുന്നവയാണ്. അന്തരീക്ഷോഷ്മാവ് കൂടുന്നതിനനുസരിച്ച് ഭക്ഷ്യോത്പ്പാദന സമ്പ്രദായത്തിലും ഭക്ഷ്യ സുരക്ഷയിലും സാമ്പത്തിക പ്രശ്നങ്ങളുടെ വ്യാപിനം ബാധിച്ചേക്കാമെന്ന് അടുത്ത കാലത്തെ പഠനങ്ങൾ തെളിയിക്കുന്നു.

മഞ്ഞച്ചോളത്തിന്റെ വിളവെടുപ്പ് 2020-ഓടെ രണ്ട് മുതൽ 14 ശതമാനം വരെ കുറയുമെന്നും 2050-ഓടെ വിളവ് അനിശ്ചിതമായി കുറയുമെന്നും പഠന റിപ്പോർട്ടുകളുണ്ട്. അതേ സമയം ഇന്ത്യൻ ജനിതക വിളകളിൽ ഗോതമ്പിന്റെ വിളവ് അനുകൂല മേഖലകളിൽപ്പോലും 50 ശതമാനം കണ്ട് കുറവുണ്ടാകാനാണ് പോകുന്നത്. നെൽകൃഷിയും ഉയർന്ന താപനിലയിൽ പ്രതിസന്ധിയെ നേരിടും. നെല്ലിന്റെ സുപ്രധാന വളർച്ചാ ഘട്ടങ്ങളിൽ അപ്രതീക്ഷിത വരൾച്ച മൂലം കൃഷിനാശം ഏറും. ഒക്ടോബറിൽ വടക്കേന്ത്യയിലും ഏപ്രിൽ, ആഗസ്റ്റ് മാസങ്ങളിൽ കിഴക്കേന്ത്യയിലും ഈ പ്രശ്നം നേരിടുന്നു. ചുരുക്കത്തിൽ, കാലാവസ്ഥയുടെ പ്രത്യാഘാതങ്ങൾ ദൂരവ്യാപകമായ സാമ്പത്തിക പ്രതിസന്ധിക്ക് കാരണമാകും. അപകട സാധ്യതയെ യഥോചിതമായി ഇടപെട്ട് ലഘൂകരിക്കാനുള്ള പരിശ്രമങ്ങൾ ഊർജ്ജിതമാക്കേണ്ടിയിരിക്കുന്നു. ഇതാകട്ടെ, ഹരിത ഗൃഹ വാതക ചോർച്ചയുമായി ബന്ധപ്പെട്ടിരിക്കുന്നു. പിന്നീടുള്ളത് പ്രത്യാഘാതങ്ങളുടെ സങ്കീർണതയും പരിതസ്ഥിതിയുമായി പൊരുത്തപ്പെടാനുള്ള ശേഷിയാണ്. ആശ്രയിച്ചിരിക്കുന്നു. ഉപഭോഗക്രമം, ജനസംഖ്യാ വളർച്ച, സാങ്കേതിക പരിജ്ഞാനത്തിന്റെ ലഭ്യതാ, സ്ഥാപനപരമായ സാധ്യതകൾ എന്നിവയാണ് മറ്റു ചില ഘടകങ്ങൾ. വിഭവ വിഹിതത്തിന്റെ മുൻഗണനാക്രമം, സാമ്പത്തിക വരുമാന ഉപാധികൾ എന്നീകാര്യങ്ങളെ സംബന്ധിച്ചുള്ള നയ രൂപീകരണത്തിൽ സ്വാധീനമുണ്ടാകുന്നത് കാലാവസ്ഥാ വെല്ലുവിളികളെ നേരിടാൻ നിർണ്ണായകമായിരിക്കും.

കാലാവസ്ഥാ വ്യതിയാനവുമായി ബന്ധപ്പെട്ട സാമ്പത്തിക പ്രശ്നങ്ങളെ പല വിധത്തിൽ പരിഗണിക്കാം. ഒരു വശത്ത്, സമ്പദ്ഘടനയിലുണ്ടാകുന്ന നഷ്ടത്തെ ത്വരിതപ്പെടുത്തുന്ന ആഘാതങ്ങൾ ശ്രദ്ധാപൂർവ്വം വിലയിരുത്തണം. മറുവശത്താകട്ടെ ലഘൂകരണത്തിലൂടെയും പൊരുത്തപ്പെടുന്നതിലൂടെയും മൊത്തം നാശനഷ്ടങ്ങൾ പരമാവധി കുറച്ചുകൊണ്ടുവരണം. പ്രത്യാഘാതങ്ങൾ കുറയ്ക്കാനുള്ള വിഭവ സാമഗ്രികൾ പൂർണമായും ലഭ്യമാണെങ്കിൽപോലും പരിതസ്ഥിതികളുമായി ഒത്തിണങ്ങുന്നതിൽ പരിമിതികളുണ്ടാകും. ഉദാഹരണത്തിന് വളർച്ചാനുബന്ധനാശങ്ങൾ പരിപൂർണ സജ്ജീകരണങ്ങൾ ഉണ്ടെങ്കിൽപ്പോലും ഉയർന്ന തോതിലാണുണ്ടാകുന്നത്. ഭക്ഷ്യജലക്ഷാമം പോഷകാഹാരക്കുറവിന് കാരണമാകും. സൂര്യാഘാതം കൈകാര്യം ചെയ്തുകൊണ്ടുള്ള പൊരുത്തപ്പെടൽ പ്രക്രി

യയിൽ ഉഷ്ണാനുബന്ധ ആരോഗ്യ മുന്നറിയിപ്പുകൾ, ഉഷ്ണദ്വീപുകളുടെ നഗരവൽക്കരണം, പാരിസ്ഥിതിക പുരോഗതി എന്നിവയ്ക്ക് മുന്തിയ പരിഗണന നൽകണം. ദൂരന്തനിവാരണ യജ്ഞങ്ങൾ, കാലേക്കൂട്ടിയുള്ള മുന്നറിയിപ്പ് സംവിധാനങ്ങൾ എന്നിവയും മതിയായ പരിഗണനയർഹിക്കുന്നു.

സാമ്പത്തിക വളർച്ചയും കാലാവസ്ഥാ വ്യതിയാനങ്ങളും തമ്മിലുള്ള ബന്ധങ്ങൾ കണ്ടെത്താൻ നിരവധി മാതൃകാ രീതികൾ പ്രയോഗിച്ചു വരുന്നു. ഇന്ത്യൻ സമ്പദ്ഘടനയുമായി ബന്ധപ്പെട്ടുത്തി മുകളിൽ നിന്ന് താഴേക്ക് നടപ്പാക്കാവുന്ന ധാരാളം വികേന്ദ്രീകൃത മാതൃകകളുണ്ട്. കാലാവസ്ഥാവ്യതിയാനം ഇന്ത്യൻ സമ്പദ്ഘടനയുടെ വളർച്ചയിൽ വരുത്തുന്ന ഭാരിച്ച സാമ്പത്തിക ബാധ്യത പ്രകടമാക്കുന്നത് ഉത്പാദനം, വിഭവവിഹിതം, ഉപഭോഗക്രമം എന്നീ തലങ്ങളിലാണ്. കാലാവസ്ഥാ വ്യതിയാനങ്ങളോട് പ്രതിപ്രവർത്തിക്കാനുള്ള ചെലവുകൾക്കായി സ്ഥിര നിക്ഷേപങ്ങളുണ്ടാകണം. ഇത് മിക്കപ്പോഴും മൊത്ത ആഭ്യന്തരോത്പാദനത്തിന്റെ ഒരു ശതമാനമായിട്ടാണ് വകയിരുത്തുക.

വർദ്ധിച്ചുവരുന്ന വെല്ലുവിളികളെ നേരിടുന്നതിന് ചില മേഖലകളിൽ പ്രത്യേകം കേന്ദ്രീകരിക്കുമ്പോൾ ധാരാളം ആപത് സാധ്യതകൾ ഇല്ലാതാക്കാം. സാമൂഹികവും സ്ഥാപനപരവുമായ കാഴ്ചപ്പാടുകളും വിപണിയേതര മൂല്യങ്ങളും ഇത്തരം സമീപനങ്ങളിൽ നിന്നും അവഗണിക്കപ്പെടാനിടയുണ്ട്. പ്രത്യേക ശ്രദ്ധ ആവശ്യമുള്ളിടത്ത് മേഖലാധിഷ്ഠിത സമീപനമാണ് അഭികാമ്യം. ശുചീകരണ സാങ്കേതിക വിദ്യ ഏർപ്പെടുത്തുന്നതോടെ ഒരു വ്യവസായ മേഖലയ്ക്ക് എന്തു മാത്രം ചെലവുണ്ടാകും, ആഗോള വിപണിയിൽ വ്യവസായിക മത്സരക്ഷമത എത്ര കണ്ട് ബാധിക്കും എന്നിവ പരിശോധിക്കുന്നതോടൊപ്പം കൂടുതൽ വിവരങ്ങൾ പകർന്നു നൽകുക എന്നതാണ് മേഖലാധിഷ്ഠിത സമീപനത്തിന്റെ കാതൽ. കാലാവസ്ഥാ വ്യതിയാനത്തെ നേരിടുന്നതിന് ലഭ്യമായ കണക്ക് വച്ച് കൈക്കൊള്ളേണ്ട തീരുമാനങ്ങൾ അനുമാനിക്കുകയോ നിവൃത്തിയുള്ളൂ. പ്രത്യേകതകൾക്കനുസരിച്ച് ഈ കണക്കുകൾ തെറ്റിയേക്കാം.

അപകട നിരക്ക് ലഘൂകരണ തന്ത്രങ്ങളുടെ ഭാഗമായി 2030 ഓടെ ഇന്ത്യയിൽ 40 ശതമാനം ഇലക്ട്രോണിക് വൈദ്യുത ശേഖരം എണ്ണയിതരസ്രോതസ് വഴി സൃഷ്ടിക്കുമെന്ന് ഇന്ത്യ UNFCCC ഉറപ്പു നൽകിയിട്ടുണ്ട്. ഇതിനായി 2.5 മുതൽ 3 ബില്യൺ ടൺ ആഗിരണ ശേഷിയുള്ള കാർബൺ സിങ്കുകൾ സ്ഥാപിക്കുവാനാണ് ഉദ്ദേശിക്കുന്നത്. വനവിഭവങ്ങളും മരവുമുൾപ്പെടെയുള്ള ഇന്ധനങ്ങൾ ഉപയോഗപ്പെടുത്തിയായിരിക്കും ഈ വാഗ്ദാനം നിറവേറ്റുക. ഇവയെക്കുടാതെസ ഊർജ്ജക്ഷമത, കാലാവസ്ഥാ വീണ്ടെടുപ്പിനുള്ള ഭൗതിക സാഹചര്യങ്ങൾ 100 നഗരങ്ങളിൽ വികസിപ്പിക്കുക, പൊതുഗതാഗത സമ്പ്രദായം മെച്ചപ്പെടുത്തുക എന്നീ

പ്രതിവിധികളും നടപ്പാക്കാം.

പരിതസ്ഥിതികളുമായി ഒന്നിണങ്ങുന്നതിനുള്ള ചെലവുകൾ കണക്കാക്കുമ്പോൾ കഷ്ടനഷ്ടങ്ങളും അവ പരിഹരിക്കുന്നതിനുള്ള കണക്കെടുപ്പുകളും അവ പരിഹരിക്കുന്നതിനുള്ള കണക്കെടുപ്പുകളും ശാസ്ത്രീയമായി വിലയിരുത്തേണ്ടതുണ്ട്. പരമ്പരാഗത രീതി സ്ഥിതിവിവരകണക്കുകളെ ആശ്രയിച്ചിരിക്കുന്നു. ധനാത്മക മൂല്യ വിശകലനം, കാര്യക്ഷമതാ വിശകലനം, ഗുണമൂല്യ വിശകലനം, മറ്റ് ചെലവ് കുറയ്ക്കൽ സമീപനങ്ങൾ എന്നിവ ശാസ്ത്രീയമായി സ്വീകരിക്കാം. അപകട സാധ്യതയിൽ വേണ്ടത്ര മുൻകരുതലുകൾ സ്വീകരിക്കാൻ ഈ വിശകലനം സഹായിക്കും.

ആവാസ വ്യവസ്ഥയ്ക്കും പരിസ്ഥിതി സേവനങ്ങൾക്കും തടസ്സം സൃഷ്ടിക്കുന്നവയെ മുൻഗണനാ പട്ടികയിൽ കൊണ്ടുവരണം. ചെലവുകളും അതിന്റെ പ്രയോജനങ്ങളും മൂല്യനിർണയം ചെയ്യുമ്പോൾ ഒന്ന് മറ്റൊന്നിനോട് മൂല്യപരമായി എങ്ങനെ വ്യത്യാസപ്പെട്ടിരിക്കുന്നുവെന്ന കാര്യം തിട്ടപ്പെടുത്തണം. ചെലവ് ഗുണാത്മക വിശകലന രീതി അവലംബിക്കുന്ന ശാസ്ത്രജ്ഞന്മാർക്ക് ഇത് തീർച്ചയായും ഒരു വെല്ലുവിളി തന്നെയാണ്. സാങ്കേതികം, പ്രവൃത്തിപരം, വ്യക്തിഗതം, സ്ഥാപനപരം എന്നിങ്ങനെയുള്ള ചെലവിനങ്ങളാണ് ഇതു സംബന്ധിച്ച നയരൂപീകരണത്തിനുള്ള ഉപാധികൾ. പൊരുത്തപ്പെടലുകളും ലഘൂകരണ നടപടികളും ആസൂത്രണം ചെയ്യുമ്പോൾ വിഭവ പരിമിതിയുള്ള സമ്പദ്ഘടനകൾ തീർച്ചയായും മുൻഗണനാക്രമം നിശ്ചയിക്കണം. ചെലവിടുന്നത് മൊത്തമായും ജനങ്ങളുടെ ജീവിത ഗുണനിലവാരത്തിൽ പ്രതിഫലിക്കുന്നുവെന്ന് ഉറപ്പാക്കുകയും വേണം. ഇന്ത്യയെപ്പോലെ ഒരു വികസ്വര സമ്പദ്ഘടന സാമ്പത്തിക നയം രൂപീകരിക്കുന്ന വേളയിൽ നിലവിലുള്ള പ്രശ്നങ്ങൾ കൂടി തിരിച്ചറിഞ്ഞ് തീരുമാനമെടുക്കേണ്ടിവരും. പരിസ്ഥിതി ആഘാത ലഘൂകരണം, സന്തുലിത വികസനം എന്നിവ പരസ്പരം പൂരകങ്ങളായി വരും.

പൊരുത്തപ്പെടലുകൾക്കും പരിസ്ഥിതി ആഘാത ലഘൂകരണത്തിനും ആവശ്യമായ ചെലവുകളെ സംബന്ധിച്ച് ആഗോളമായുള്ള കണക്കെടുപ്പിൽ പ്രകടമായ വ്യത്യാസങ്ങളുണ്ട്. ഇന്ത്യ INDCയ്ക്ക് ADBപഠനം വെളിവാക്കുന്നത് – കാലാവസ്ഥാവ്യതിയാനം മൂലം ഇന്ത്യയിൽ സാമ്പത്തിക തകർച്ചയും നഷ്ടങ്ങളുമുണ്ടാക്കുന്നത് 2050 ഓടെ 1.8 ശതമാനനം ആഭ്യന്തര ഉത്പാദനം കുറയ്ക്കുമെന്നാണ്. ഈ പഠനം തുടർന്നും ചൂണ്ടിക്കാട്ടുന്നത് കാർബൺ ബഹിർഗമന നിരക്ക് സാധാരണ നിലയിലേക്ക് കൊണ്ടുവരുന്നതിന് 834 ബില്യൺ ഡോളർ 2030 വരെ നൽകേണ്ടിവരുമെന്നാണ്. INDCയുടെ പ്രാഥമിക കണക്കുകൾ സൂചിപ്പിക്കുന്നത് ഏകദേശം 206 ബില്യൺ ഡോളർ 2015നും 2030 നും ഇടയിൽ കൃഷിസ വനവത്ക

രണം, മത്സ്യ ബന്ധന സൗകര്യങ്ങൾ, ജലസ്രോതസ്സുകൾ, ആവാസ വ്യവസ്ഥകൾ എന്നിവക്കുവേണ്ടി ഇന്ത്യ ചെലവിടേണ്ടി വരുമെന്നാണ്.

ജീവിതത്തിന്റെ അടിസ്ഥാന ഗുണനിലവാരം ഉറപ്പാക്കുക, പൊരുത്തപ്പെടൽ ശേഷി ഉയർത്തുക, പൊതുജനാരോഗ്യ സൗകര്യങ്ങൾ ക്രമീകരിക്കുക, ജൈവ വൈവിധ്യം സംരക്ഷിക്കുക, സൗകര്യപ്രദമായി സാങ്കേതിക വിദ്യ കൈമാറ്റം ചെയ്യാൻ അവസരമുണ്ടാക്കുക, വിജ്ഞാനം പങ്കുവയ്ക്കുക, സാമൂഹികവും സാമ്പത്തികവുമായ അസമത്വങ്ങളെ നേരിടുക എന്നീ കാര്യങ്ങളിൽ ഗവൺമെന്റ്–പൊതുമേഖലാ സ്ഥാപനങ്ങളുടെ ഇടപെടലിനൊപ്പം സ്വകാര്യ സ്ഥാപനങ്ങളുടേയും പൊതുജനങ്ങളുടേയും തുല്യപങ്കാളിത്തം ഉറപ്പാക്കണം.

യോജന,

ഡിസംബർ 2015.

Kerala’s forgotten people

Ramesh Chakrapani

Slavery, to the lay Indian reader, is an alien, loathsome concept associated with horrors and atrocities in distant lands -a vile, despicable practice that characterised imperial rule in the previous century.

It usually conjures up images of Africans in chains in the Americas and brings to memory their struggles and the abolition of slavery by Abraham Lincoln. P. Sanal Mohan challenges such notions in his remarkable work on the “slave castes” of Kerala and their rebellion against the caste system that legitimised and institutionalised slavery. Without mincing words, he employs a language that is shocking in its candour yet essential to understanding the opprobrium of the system that existed and the revolts against it. By eschewing established usages such as “oppressed people” and “marginalised sections”, he distresses our comfortable views by plainly stating that what was in existence for a very long time in the region that constitutes present-day Kerala was nothing but slavery, and that its victims were “slave castes”.

But Sanal Mohan has not just written a history of Dalit suffering and their continuous battle to free themselves of the shackles of the status quo; it is also a history of the histories of his own people written by missionaries and upper caste elite and the failings therein, because the outsider is never able to fully articulate the lived and shared experiences of the oppressed.

Black struggle for equality has a long and chequered history in the United States, right from the time slavery was abolished in the mid-18th century after protracted opposition, followed by a civil war and segregation and then the civil rights movement of the 1960s, to the most recent Black Lives Matter movement in response to police brutality that has victimised hundreds of black people.

The Dalit crusade for equality in India has a similar history, but unlike the anti-racism movement in the U.S., it has always been relegated to the sidelines, swept aside by the overarching themes of nation- building and progress.

And in the case of Kerala, where the modern movement had its origins, it has been subsumed by a pan-Kerala paradigm that consistently ignores the elephant in the room. So, the Dalit cause is not only one seeking a rightful place in society but also an effort to prevent authentic Dalit voices from being drowned out by the noise of the mainstream.

In the chapter titled "Memory and Experience: Discourses of Slavery", the last footnote reads: "The PRDS [Prathyaksha Raksha Deiva Sabha] officially celebrates the anniversary of the [British queen's] proclamation [that abolished slavery in 1855] every year on October 16 with public rallies. No other organisation, government, or community even refers to it."

Perhaps unwittingly, the author has described, in one fell swoop, the negligible importance accorded to the history of Dalit struggles in Kerala and the extent to which social and organisational boycott has airbrushed from public imagination the stories of the "slave castes" and how they have been waging a battle to reclaim their dignity. It is telling that Kerala, acclaimed as "god's own country" in a million advertisements, unites to celebrate festivals rooted in mythology and customs and traditions that valorise its past, conveniently brushing under the rug the iniquities against Dalits and indigenous people.

This book is an important addition to the canon of modern Dalit literature as it sheds light on a largely unknown chapter in the story of subaltern resistance to the hegemonic structure of the caste system, and on southern Dalit icons like Poyikayil Yohannan and Pampady John Joseph, whose triumphs have not received their fair share of recognition. It is time they were honoured and their names remembered along with other southern luminaries such as Ayyankali, Iyothee Dass, Rettaimalai Sriniva san and M.C. Raja. Its significance also stems from its examination and expose of caste slavery as an instrument of oppression, forcing readers and scholars, and hopefully society at large, to rethink their notions of the caste system for what it was and, in many ways, continues to be.

The Arrival Of Missionaries

The crux of the book lies in its exposition of the effect that the arrival of Protestant missionaries had on the lives of the Dalits in Kerala, the mirage of equality that the Church provided, Dalit revolt against the Church's refusal to question inequality and enslavement, the unequal distribution of land and the birth of new movements within the denomination which saw many Dalits, now doubly wronged, walk away from the Church but not the faith.

Missionaries belonging to the London Missionary Society and the Church Missionary Society (CMS) engaged closely with "slave castes" of the 19th century in Kerala such as the Cherumas, Pulayas, Kuravas, Parayas and Thanda Pulayas and left behind a wealth of material which the author has thoroughly explored to reconstruct a montage of forgotten faces, voices and stories.

Dalit Liberation Theology

Divided into six chapters, the book analyses the lives of the "agrestic slaves" and the social and political changes brought about by the missionaries' arrival in the 19th and early 20th centuries.

One chapter talks in a most fascinating way about the rise of the messianic movement of the PRDS, founded by Poyikayil Yohannan, an intriguing figure who declared himself divine and whose socio-religious movement grew immensely popular, aided by song and oration. The author offers tremendous insight into how Dalit movements handled the issues of spiritual and material fulfillment.

Yohannan, a pioneer of Dalit liberation theology, was an ardent follower of the Mar Thoma Church but also a fierce critic of the Church's discrimination against Dalits, which culminated in his exit from the church.

He joined the CMS, only to leave it and join the Brethren Mission, but the situation was no different, with the albatross of caste following him wherever he went and weighing him down.

Yohannan decided it was time to break free of the formal church structure, even though he did not renounce the Christian faith.

As an independent preacher, he quickly gained several followers and the PRDS was born. Yohannan was also politically and socially active, championing the cause of Dalit education, political representation and land reforms.

Although the author remains focussed on the travails of the "slave castes" and devotes a lot of space to issues such as the conflict between them and the Syrian Christians (a majority of whom were the land-owning elite), the breaking up of Dalit families, the role of the governments of the day, and the overall transformation of Dalits, he also points to two glaring omissions in historical discourse in Kerala.

He joins issue with Marxist historians for their not factoring in the presence of the Dalits in farm labour or accounting for their appalling social status in their analysis of the agrarian class structure.

Secondly, he decries the traditional focus on backward castes and their agitations against social abominations, as manifested in the breast cloth agitations by Nadar women and temple entry movements by Ezhavas.

Sanal Mohan's criticism is rooted in the actuality of these "social revolutions" sidestepping the issue of slavery. The need of the hour is more scholarship and studies on how Dalits engaged with modernity and this book is a worthy effort in that direction.

In his dedication, the author acknowledges his parents, who "would have been happy to see this work had they been alive as they would have recognised in it a bit of their own history".

In a way, that statement rings true for the entire Dalit fraternity, across generations, for theirs is a universal story of oppression and their struggle against it, a story largely untold.

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Challenging Economic Inequality Tactics and Strategies

Susan Engel, Brian Martin

Inequality in various realms-economic, political and social-appears to be an enduring feature of human societies. However, many challenges have been made to extreme forms of inequality: for example, democratisation movements have challenged dictatorships and various forms of political exclusion; labour movements have campaigned against economic inequality making the case for a living wage and social protection; and social exclusion of various groups is widely castigated as prejudice. While all forms of inequality have persisted, what is notable is that economic inequality has increased and, according to many analysts, become much more extreme within countries through processes of corporate globalisation (Cammack 2009; Piketty 2014).

Most humans have a well-developed sense of fairness (Moore 1978). Haidt (2012) argues that fairness is one of the fundamental moral foundations deriving from humans' evolutionary past. It is found in people of all political persuasions, and is especially important for those on the left. On an informal level, many parents observe that their children compete for their attention and resent being treated unequally. In workplaces, grievances develop when workers are rewarded differently when doing the same work. Yet, despite this sensitivity to fairness, wide-scale economic inequality in contemporary societies has persisted and sometimes increased.

Governments are often seen as the means for redressing unfairness: they have the capacity to redistribute income and wealth through policies of taxation, investment and welfare. Despite the efforts of reformers, though, the divergence between the wealthy and the impoverished has continued within and between countries. A whole range of data has come out over the past few years to support this claim (Inequality.org 2015; OECD 2011; Piketty 2014), the most recent being an Oxfam report that by 2016 over half the world's wealth will be owned by just the richest 1% of the world's population. The trend to increasing inequality is clear in the report: "In 2010, it took 388 billionaires to equal the wealth of the bottom half of the world's population; by 2014, the figure had fallen to just 80 billionaires" (Hardoon 2015: 3). Although there are periodic

expressions of concern and impressive-sounding policy statements, political concern about inequality is seldom as great as for economic growth, terrorism, crime and a host of other topics. Indeed, until the rise of the global justice movement and the Occupy movement, inequality was not a serious agenda item for most governments.

To better understand how economic inequality has been marginalised in public discourse and thinking, it is useful to look at tactics of outrage management (Martin 2007). When a powerful group does something that might be perceived as unjust, it can use several types of tactics to reduce public outrage, with the key ones being to: (i) cover up the action, (ii) devalue the target, (iii) reinterpret the action by lying, minimising consequences, blaming others or reframing, (iv) use official channels that give an appearance of justice, and (v) intimidate or reward people involved.

A good example of how these tactics are employed is in cases of torture, which is widely condemned but, nevertheless, often tolerated and rarely prosecuted. Individuals and governments implicated in torture hide their activities, denigrate victims as terrorists, criminals or subversives, lie about the extent of torture, minimise the impact of it, blame individuals for abuses, reframe torture as “abuse” or define it away (as in the case of water-boarding), use courts or investigations to whitewash actions, threaten victims of reprisals if they speak out, and reward compliant officials with jobs and promotions (Martin and Wright 2003). The same sorts of tactics are found in a wide variety of injustices, including censorship (Jansen and Martin 2003), sexual harassment (McDonald et al 2010), corporate crimes such as Bhopal (Engel and Martin 2006), and genocide (Martin 2009). Therefore it is plausible that similar tactics serve to reduce people’s concerns about inequality.

Tactics used to reduce public outrage are most apparent in sudden injustices, such as police beatings and massacres of protesters. In the aftermath of the exposure in 2004 of the torture and abuse of prisoners at Abu Ghraib by United States (us) prison guards, outrage was expressed throughout the world, and the methods of devaluation, reinterpretation and official channels were obvious (Gray and Martin 2007). Inequality is different in that it is an ongoing process, with few sudden events to trigger an increase in concern: it is a “slow injustice” (Martin 2006). Therefore, tactics to reduce outrage are likely to be more routine and institutionalised.

Usually, tactics to reduce concern about inequality are used in an intuitive way rather than as part of a conscious strategy or conspiracy to subordinate the poor. Most perpetrators of violent and cruel acts believe they are justified in what they do, or do not think their actions are all that important (Baumeister 1997), and undoubtedly those acting in ways that foster inequality feel similarly. Furthermore, perceptions are shaped by self-interest, with research supporting Lord Acton’s classic saying that “Power tends to corrupt and absolute power corrupts absolutely” (Kipnis 1976; Robertson 2012). As well, a small percentage of people display antisocial personality traits, having concern only for themselves and not others; some of these individuals rise to positions of power within hierarchical systems (Babiak and Hare 2006; Berke 1988). For these reasons, it is not surprising that some people want greater inequality and believe it is good.

Rather than try to determine people's motivations, our aim here is to illustrate the tactics that reduce outrage over inequality. This involves noting methods well known to informed observers but seldom combined into a tactical or strategic analysis. We use examples from different parts of the world, as our goal is to demonstrate the plausibility of the crucial role of tactics rather than provide exhaustive proof. Following this, the next step in the analysis is to point to counter-tactics that increase concern about inequality. These are (Martin 2007): (i) exposure of inequality, (ii) validation of those who are most oppressed or marginalised, (iii) interpreting inequality as a form of injustice, (iv) avoiding official channels but instead mobilising support, and (v) resisting intimidation and rewards.

To illustrate these counter-tactics, we use several examples, with special attention to the Occupy movement.

Because tactics to reduce or increase outrage are found in so many different sorts of injustices, there is potentially much to learn by comparing tactics used, or not used, in different issues. In undertaking an analysis of tactics used in relation to inequality, there is much to learn from the dynamics of outrage over torture, massacres and other injustices.

Cover-up

If people are not aware of an issue, they will not be concerned by it. Even if they know it exists, the issue may be disguised or covered over in various ways, so it is less likely to be noticed. Nearly everyone knows about the existence of inequality, but in various ways its visibility is reduced, thereby reducing awareness and the likelihood of action against it.

One way to reduce awareness is physical separation. This is most obvious in residential stratification by income, with rich people likely to live in exclusive areas. The former system of apartheid in South Africa involved separate facilities for blacks and whites. However, formal apartheid is far more likely to create a backlash than a seemingly natural separation, thus this is not a common tactic. Poverty in the midst of affluence is sometimes accepted as normal, but for some it can be disturbing. Beggars and homeless people are usually absent from wealthy areas; sometimes governments instruct police to force them out of their usual areas, which serves to reduce the visibility of poverty.

Cover-up of inequality is partly about hiding poverty but more about minirnising understanding of the wealth of the rich. A number of surveys has shown that people significantly underestimate income and wealth differentials in their country and would prefer a more equal wealth distribution that the one that they incorrectly think is the case (Norton and Ariely 2011; Norton et al2014).

In many parts of the world, including India, the wealthy and the impoverished live in clear view of each other: there is little attempt to hide inequality. This suggests that cover-up, as part of the toolkit working for inequality, is not as common as a lack of interest in the topic or as

reinterpreting inequality as due to the supposed intelligence and hard work of the wealthy or devaluing the poor, where the poor are said to be responsible for their situation because of their laziness, lack of smarts or because they are simply “Shameless”-as the British TV series puts it. These methods are described in the next two sections.

Devaluation

One of the most potent ways to reduce outrage over injustice is to discredit those at the receiving end. Therefore, attempts may be made to lower the status of victims of injustice, thereby diminishing concern about the injustice itself. Poor people are regularly blamed for their own misfortune, a process called”blaming the victim” (Ryan 1972). They are castigated as being lazy, cheating, unclean, drug-dependent, criminal and in other ways unworthy. The basic idea is that success in the contest for riches is due to the characteristics of the competitors, and those who are poor are failures in every way.

Blaming the victim is aided by a psychological process called belief in a just world (Lerner 1980). Some people believe the world is fair and, when confronted with evidence to the contrary, maintain their belief by saying people are responsible for their own misfortune. Those who are unemployed are blamed for not finding jobs even when unemployment is structural, with dozen of applicants for every vacancy. People who are highly committed to just-world beliefs are more likely to blame poor people for their poverty. This belief is common across developed and developing countries and it results in a poverty/shame nexus (Walker 2014; Chase and Bantebya-Kyomuhendo 2015). Policies and public commentators push poor people to feel ashamed, and some of them take this on and devalue themselves. Shame has traditionally been seen as a useful mechanism for social cohesion and control, yet the negative impacts of it on the poor have received little attention. Walker (2014: 40) has shown how its “psychological consequences can be severe; ... low self-esteem, depression, anxiety, eating disorder symptoms, post-traumatic stress disorder, and suicidal ideation have all been associated with shame ...”

Shame on its own is damaging enough but when it becomes part of government policy it becomes stigmatising and even more damaging to the poor. Inducing shame has long been a feature of many social welfare programmes; its use has increased in recent years with measures like income quarantining. An even more disturbing trend is the deliberate use of shaming and stigmatisation in order to get people to construct their own latrines (Engel and Susilo 2014).

Walker (2014: 44) also provides evidence that the shame associated with poverty has grown with globalisation since the 1980s. The corollary to increased emphasis on individualism and consumerism of the past decades may well be greater shame and stigma for those who have not succeeded. The counterpoint to devaluation of the poor is glorification of the wealthy and this has also increased since the 1980s. Individual success stories are regularly presented as moral lessons in the virtues of hard work and enterprise. Similarly, successful companies are presented

as models, with their methods emulated, even though their success may only be short term and due in large part to luck (Rosenzweig 2007; Taleb 2001).

In situations where inequality is stark, devaluation of those who are disadvantaged is a key method of reducing outrage, with poverty-related shame now the “cement” in the structures that maintain inequality and perpetuate poverty (Walker 2014: 191). Those who are ashamed of their poverty are less likely to confront the wealthy, thereby contributing to de facto cover-up.

Reinterpretation

Reinterpretation involves explaining why inequality is acceptable, necessary, natural or beneficial. This has a stronger cognitive component than devaluation. Four techniques of reinterpretation are lying, minimising, blaming and framing.

Lying in this context involves giving false or deceptive information about the extent, consequences or responsibility for inequality. For example, it might be claimed that unemployment payments damage the initiative and prospects for the unemployed, when the evidence says otherwise. People can lie to themselves in a process called self-deception (Trivers 2011), so those who provide false information may also be deceiving themselves.

There is a close connection between the techniques of cover-up and reinterpretation by lying. In cover-up, people do not know a problem exists; in reinterpretation by lying, they are given false information about it. Consider the well-known fact that the per-capita gross domestic product in India is much less than in Britain. What is little known, at least outside India, is that prior to the British conquest of India, living standards of working people in the two countries were similar, and that a significant part of their subsequent divergence can be attributed to colonial exploitation (Davis 2001). Yet many internet sources on British imperialism in India start with its supposed benefits, with students asked to weigh up the positives and negatives as if the railways could make up for the between 12 and 29 million deaths during the late Victorian era famines that can be largely attributed to British policy (Davis 2001). The broader point here is that current level of inequality is known but the historical processes leading to it are seldom understood or publicised.

“Minimising” means suggesting that the scale or consequences of inequality are not as serious as they actually are. An example is the prominence of the $1.25 a day measure of global poverty. Using this measure the World Bank could claim in 2014 that the number of people living in poverty declined from 1.93 billion in 1981 to 1.2 billion in 2011 and looked at as proportion of the world’s (growing) population, the fall sounds large. The $1.25 a day measure was calculated by taking median of 10 lowest poverty lines across the globe in 1985, it only allows people a very frugal existence and results in a shortened life expectancy. The measure significantly understates the level of global poverty, even considered in absolute (not relative) terms. To achieve a reasonable life expectancy and the associated quality of life, Edward (2006) calculated that the associated

income was closer to $3 a day. When we look at the poverty figures using even a $2 a day calculation, there has been less progress in poverty reduction-in 1981 there 'were 2.59 billion in that category and for 2011 the estimate was 2.2 billion. The consequences of the $i.25 a day calculation cascade, if you are above that you are no longer regarded as absolutely poor. The Economist (2008, 2009) is very fond of labelling those with incomes above $2 a day as the new middle class!

At yet another level, the very focus on poverty, not inequality, is a way to minimise concern about inequality because empowering the poor has, over the past few decades, not been regarded as being in any way linked to the power or wealth of the rich (Freeland 2012; Marcuse 2015). When inequality is the focus, the rich come under scrutiny as the Occupy movement showed. Here we see how different tactics converge as this is an issue of both minimising inequality and reframing it, discussed shortly.

As well as blaming the victim (a type of devaluation), it is also possible to blame others. For example, governments can blame greedy corporations and corporations can blame ineffective governments, or they can blame previous governments or individual politicians. In the case of inequality, the "blame" is often put on supposedly natural socio-economic processes. For example, the Economist (2015) attributes a large part of the recent upsurge in us inequality to an escalation in assortative mating, which they describe as where "clever, successful men marry clever, successful women" rather than as, say, people marrying in their own class. Again, this blame also converges into the area of framing, which is the most potent reinterpretation technique. It is a process of seeing and presenting inequality in a way that makes it seems acceptable or natural. Historically, religious doctrines or local philosophies were a major force in framing inequality. Confucius said that when a country is "well governed, poverty is something to be ashamed of" (cited in Walker 2014: 5). In India, the Vedic civilisation attributed inequality and poverty to people's actions in their previous lives and the later development of karma encouraged acceptance of existing circumstances. The Christian tradition started out promoting poverty as the way to salvation but this did not last long and the more pertinent legacy is the distinction between the deserving and the undeserving poor. These traditions too often counsel acceptance of one's situation, say that poverty is natural, or promise that things will be different in a future life. While such doctrines can provide peace of mind for individuals, they also reduce the incentive to question or challenge inequality.

Since the late 19705, neo-liberal ideas have actively promoted inequality as a natural state. As one of the founding fathers of neo-liberalism, Friedrich von Hayek (2006/1960: 76), said:

It has been the fashion in modern times to minimize the importance of congenital differences between men and to ascribe all the important differences to the influence of environment. However important the latter may be, we must not overlook the fact that individuals are very different from the outset. The importance of individual differences would hardly be less if all people were

brought up in very similar environments. As a statement of fact, it just is not true that ‘all men are born equal.

Neo-liberalism promotes belief in meritocracy, in which people rise in the system according to their talents. This can serve to justify inequality, because it assumes that social systems are hierarchical and that divergences in outcomes are natural. The ways that people at the top of hierarchical systems use their power to reward themselves is obscured. Equally, stigmatisation of the poor has grown as this approach attributes poverty to failure, laziness, lack of intelligence and so on.

Academics present many arguments to justify inequality, for example arguing that talented people need to be amply rewarded so they will undertake important jobs, that low wages lead to higher employment, that prejudice is natural and greed is good (Dorling 2010).

Official Channels

Various formal processes in society give a figurative stamp of approval for inequality. The most important is schooling, which is a system that reproduces and legitimates social stratification. Those who do better at school obtain high grades and more advanced degrees, which may be prerequisites for certain types of jobs. Not having a diploma, degree or sufficiently high grades can be a rationale for denying a person a job, even when the credential or grades are irrelevant to the work (Collins 1979; Dore 1976). The education system seems to offer a justification for inequality, even though there is no necessity that those with degrees should receive higher income.

Welfare agencies, providing various payments and services for those in need, are usually highly bureaucratic, with many complex rules concerning who is entitled to what. Applying these rules according to rigid formulas helps legitimate the social location of those served: if a person or family is ruled as ineligible for a payment for unemployment or disability, this serves as a type of official statement that they do not deserve anymore.

The legal system regularly makes rulings that reinforce the legitimacy of inequality. Those who are seriously disadvantaged are more commonly subject to attention from the police and courts, whereas high-level crimes, such as massive corruption or production of dangerous products, are seldom prosecuted. In the aftermath of the Bhopal disaster, the company responsible, Union Carbide, was able to escape with minimal penalties. The various court cases on behalf of victims of the disaster led to pitiful levels of compensation, yet gave a stamp of legitimacy to the outcome (Engel and Martin 2006).

Official channels are rule-based systems that promise to provide justice. Yet these systems are themselves biased in ways that make them tools for the rich and powerful. As writer Anatole France famously commented, “In its majestic equality, the law forbids rich and poor alike to sleep under bridges, beg in the streets and steal loaves of bread.” When the rules are biased or applied in a biased fashion, they give the appearance of fairness without the substance.

Intimidation and Rewards

Some of those who challenge inequality are met with reprisals, including harassment, job loss and assault. When workers, especially low-paid workers, organise to demand better wages and conditions, they are sometimes met with harsh opposition. Union organisers are special targets. The us, the most unequal industrialised country, is noted for employer campaigns against unions.

Whistle-blowers-employees who speak out in the public interest-are often subject to reprisals (Miceli et al 2008). These include whistle-blowers in government and corporations who expose corruption at high levels, for example, tax avoidance by wealthy people, pay-offs to government officials who give favoured deals to corporate friends, or even just the packages obtained by those with high incomes. The Occupy movement, which burst into public consciousness in 2011, was essentially a protest against inequality. In some countries, Occupy protesters were subject to attacks by police.

Intimidation can serve to discourage challenges to inequality; a parallel tactic is offering rewards to those who serve to protect or justify inequality. One example is corrupt union officials, who connive with employers to keep a poorly paid workforce quiescent. Leaders of left-wing political parties, who say they support a fairer society, can be lured by the privileges of office, and become far more conservative when they are elected. There is a long history of progressive parties and politicians failing to live up to the expectations of their followers (Boggs 1986; Miliband 1969).

These five sorts of tactics to reduce outrage over inequality often overlap. For example, elections are an official channel that often promises more than it delivers, while rewards for party leaders serve to buy off challengers. The value in classifying tactics is to clarify and group the great variety of methods used, and to show more clearly pathways for taking action to oppose inequality. Each of the five types of tactics reducing outrage over inequality can be countered by corresponding tactics to increase outrage. We now turn to examples of these outrage-increasing tactics, with special attention to the Occupy movement (Gitlin 2012; Graeber 2013; Sitrin and Azzellini 2014).

Exposure

If cover-up is a key method for reducing outrage, then the obvious counter tactic is exposure of the injustice. This is indeed the method used by many who seek social justice: social problems are documented and publicised.

In some workplaces, the salaries of top management are not disclosed, and furthermore are disguised through such techniques as providing share options. When salaries are publicised and compared to those of low-level workers, this can cause outrage, which is even greater when top

management is involved in corrupt activities. The Occupy movement has served as a method of exposing inequality; indeed, its most lasting legacy may be putting inequality on the public agenda. Through public protests and through the memorable attention to a division in society between the wealthiest 1% and the other 99%, the movement has drawn attention to economic inequality. A related campaign has been exposure of tax minimisation and avoidance strategies by multinational corporations or the super-wealthy, for example by the Tax Justice Network.

Validation

The technique of devaluation reduces outrage; the countervailing technique is validation of those who are the targets or victims of unjust actions and systems. Validation can be promoted by treating poor and disadvantaged people with respect, by associating them with positive symbols and values, and through their own dignified and courageous behaviour.

A classic validation technique is organised action, taken in a resolute manner. When lowly paid workers join rallies, strikes and boycotts, and present themselves as worthy of respect, they are more likely to be treated seriously. Validation also occurs by association with valued individuals, organisations and symbols. When prominent people - respected politicians, religious leaders or celebrities-speak on behalf of those who are disadvantaged, this contributes to greater respect; even better is personal involvement with those who are otherwise stigmatised. Dalit groups in India have reframed cultural beliefs that traditionally worked to oppress them as untouchables, to create new identities. The belief that they were the earliest in- habitants of India has been used to develop a "Dalitology" that validates their existence rather than undermines it. This has developed along with a range of Dalit literature that resists the inevitability of discrimination against Dalits (Nimbalkar 2006).

When wealthy, prominent business persons, such as Warren Buffet and George Soros, speak out against inequality, this has an extra impact because they have nothing to gain financially from measures for social justice. While it is important for oppressed people to take stands on their own behalf, forming alliances with those in other parts of society is vital.

Interpretation

Given the various methods of reinterpretation-lying, minimising, blaming and framing-the counter-tactic is to interpret inequality as unjust and harmful. The inherent unfairness of extreme inequality needs to be highlighted, as well as the impacts of inequality.

In recent years, one of the most powerful analyses of the harmful impacts of inequality has been the book The Spirit Level (Wilkinson and Pickett 2009). The authors document that societies with greater economic inequality are worse off in various ways, such as having greater crime and suicide rates. Their focus is on the damaging psychosocial impacts of inequality on society in general. There is also a growing body of research specifically on its impacts on the wealthy,

which shows that wealth blunts the parts of the brain linked to empathy and that the rich are more likely to violate road rules, cheat to achieve financial benefits and even that they are more likely to shoplift (for a review of research, see Lewis 2014).

Others have argued that inequality can lead to slower economic growth, or even stagnation (Acemoglu and Robinson 2012; Ostry et al 2014), countering the usual trickle-down argument. Various authors have documented the huge influence of powerful industries-energy, pharmaceuticals, transport-on government policy, so much so that governments are often tools of special interests rather than serving the public interest (Stiglitz 2012).

Much of the intellectual debate over inequality occurs in academic journals and books, but this has spilled over into public discourse, in part due to the influence of the social justice movement and the Occupy movement. Thomas Piketty's 2014 book Capital in the Twenty-First Century achieved bestseller status, something that would have been unlikely without the increased public discussion of inequality. Very importantly, Piketty and his colleagues have provided strong data demonstrating the rise in inequality since the 19805 and refocused debate about state revenue away from cutting social security, health and education benefits and services and instead towards the income side of the state ledger, in particular the method and amount of taxation of wealth and income.

Another contributor to the public debate is research on happiness, in the field of positive psychology. Among the well-established findings are that greater income can improve happiness among those in poverty, but the benefits of added income are much more limited for those with a reasonable income (Frey et al 2008). Furthermore, happiness can be reliably improved through such non-materialistic practices as building personal relationships, expressing gratitude and helping others (Lyubomirsky 2008). Positive psychology can be used as a warrant for changing society to foster community and egalitarianism rather than competitive materialism.

Mobilisation, Not Official Channels

The most counter-intuitive aspect of the tactics for outrage management is that official channels such as courts may not be the solution but in many cases actually reduce outrage and hence discourage popular action. This is because official channels give the appearance of justice but, when used to challenge powerful groups, seldom the substance. Petitions, appeals to authorities, interventions by international bodies, formal investigations, courts, politicians or elections can sometimes be effective roads to reform, but to increase outrage over injustice, it is better to avoid relying on them. Although many who work in official bodies have the best of intentions and do everything they can to serve the population, they are constrained by narrow mandates, bureaucratic requirements, limited resources, and the possibility of losing their jobs should they become too activist.

Insights from many decades of social movements show that direct action can offer better prospects for change. The labour movement in the late 19th and early 20th centuries was instrumental in improving workers' rights in the West. The Indian independence movement saw Gandhi write letters to the Viceroy. as a formality, not in any expectation that formal appeals would be successful. He launched direct action campaigns, such as the Salt Satyagraha in 1930, which changed consciousness across the country: people became energised rather than resigned (Weber 1997).

Similarly, social justice campaigners have had the greatest impact through organised mass action. The 1999 global justice protests in Seattle stimulated similar protests in many cities across the globe. Likewise, Occupy Wall Street set an example followed elsewhere in the US and the world.

Two main sorts of direct action are relevant here: to challenge inequality and to promote equality. The Occupy movement largely focused on increasing awareness of and concern about inequality, though it has also run a range of positive initiatives, in the tradition of Gandhi's constructive programme, to create the skills, resources and vision of a more equal society.

One example of an equality-promoting initiative is free software, cooperatively produced: it undercuts the intellectual monopolies that serve the powerful software companies, and by offering a positive alternative promotes greater access to a range of capacities. More generally, peer-to-peer alternatives in several fields can expand the commons-in energy, transport, information, creative works-and potentially undermine market capitalism (Rifkin 2014). In Greece, in the wake of the crisis, people set up successful solidarity health centres, food centres and cooperatives in their hundreds, which inspired and was one support base of the newly elected Syriza-led government (Henley 2015).

Resistance to Intimidation and Rewards

The tactic of intimidation discourages expressions of concern, while rewards buy off dissent. To increase outrage and action against inequality, both intimidation and rewards need to be resisted. This is apparent in the courageous efforts of Occupy activists.

Resistance is also important in other arenas, in small and large ways. It can involve workers with access to information about corruption and harsh treatment of disadvantaged groups having the courage and the skills to collect documents and make them available to activists. It can involve journalists writing stories exposing obscene behaviour by the wealthy and telling about courageous campaigners for social justice. It can involve individuals quietly engaging with friends and colleagues to shift attitudes concerning inequality.

Conclusions

Inequality is linked to considerable poverty, ill health and suffering, yet is entrenched in many countries. Although many people consider extremes of inequality to be undesirable, public

concern only occasionally reaches critical mass. Indeed, according to Piketty's (2014) analysis, it took the combination of the devastation of two world wars, high post-war population growth and the active labour movement to achieve the significant reductions in inequality that occurred between the start of the 20th century and the 1960s. To better understand the dynamics of concern about inequality, it is useful to examine tactics that reduce or increase public outrage. Defenders of inequality can use tactics of cover-up, devaluation, reinterpretation, official channels, intimidation and rewards to reduce outrage; challengers can use corresponding counter-tactics.

One implication of this analysis is that supporters of social justice need to give attention to the full range of tactics. It is not enough to assume that evidence and logic are enough on their own to stimulate action, given that existing perceptions and beliefs work to hide inequality and the desire to believe in a just world promote the corollary belief that the poor are responsible for their poverty. Equally it is important to understand the role of official channels, including formal inquiries, government agencies, and elections. Many people assume that official channels are always the appropriate avenues for seeking justice and, as long as officials or politicians are committed to doing something, nothing further is required. However, the lesson from many other injustices, from sexual harassment to massacres of peaceful protesters, is that when powerful perpetrators are involved, official channels sometimes give only an appearance of justice.

Many people put their trust in progressive governments to counter the inequality spawned by unbridled markets, but over the past ‘several decades this trust has been broken repeatedly. Despite this, citizens often look to governments as the main solution, rather than being part of the problem. The analysis of the outrage-reducing role of official channels suggests it is more productive to pursue methods that directly tackle problems, rather than relying on those in positions of power to act on their behalf. When social problems are highly entrenched, it is to be expected that formal processes have become implicated in the problems, either contributing to them or serving as escape valves.

The Occupy movement, an aspect of the global justice movement, has put inequality on the agenda, so that mainstream media and politicians now take the issue seriously. However, there are strong forces working against any systemic approach to it, starting with inertia and governments prioritising economic growth over equality or sustainability. So, it would be easy for inequality to slip out of public consciousness, as governments raise the alarm about other issues, such as terrorism. Generation of public outrage is part of the process in addressing poverty and disadvantage, and in promoting social justice; it needs to be accompanied by long-term efforts towards different ways of organising society.

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Minimise crop risk

Jitendra

As world leaders congregated at Paris on November 30 to look for ways to mitigate the effects of climate change, an unusually strong northeast monsoon hit southern India for the third time in a month. The heavy spells of rain have affected standing crops of pulses, turmeric, onion, chilli, coriander and banana over thousands of hectares in the region. This is the seventh consecutive crop failure that most parts of the country have faced due to unforeseen weather events. Earlier this year, unseasonal rains and hail-storm had hit at least 15 states that produce over 80 per cent of the country's food grains. And every time such a disaster hits the country, it pushes farmers into further distress, and ultimately forces them to commit suicide.

Such growing agrarian crisis due to climate change prompted Delhi-based think tank Centre for Science and Environment (CSE) to look for ways to protect the country's farmers, who are mostly small-scale and marginal. On November 27 and 28, it held a national-level consultation with farmers, policymakers and activists, who suggested that the government must urgently address the growing grievance of farmers by introducing scientific ways of estimating crop loss and by providing universal crop insurance to small and marginal farmers.

Rely on science, not word of mouth

Crop loss assessment is the first step to offer any kind of relief to affected farmers. "But the existing method in the country is primitive and crude; says Yogendra Yadav of Jai Kisan Andolan, a farmers' rights movement. The government assigns the duty to apatwari or lekhpal (lowest-rung government official of the land revenue department) who has no knowledge of crops nor do they follow scientific techniques for assessing crop loss. Besides, on an average, a patwari has to assess 5,000-10,000 hectares. With multiple landholdings, ownerships and crop patterns, this would take over a month to physically verify the land and ascertain the damage. Since a patwari has to assess crop loss within two to seven days, in most cases, their assessment is based on guesswork or information from friends. Devindra Pal Singh, Tehsildar, department of revenue, Uttar Pradesh, says computerisation of land records can ease some of their burden.

Remote sensing and technologies like global positioning system (GPS) and geographic information system (GIS) can significantly improve the accuracy of crop loss assessment, says J. S. Parihar, former deputy director of the Indian Space Research Organisation. But for this, the government must first computerise land records and data related to sown crops, and develop a colour index for different stages of plant growth, Parihar says. He adds that India has the capacity to increase the number of high-resolution satellites that can precisely monitor large swathes of farmland.

However, for accurate crop-loss assessment, experts suggest developing a method based on crowd sourcing. Farmers can use smart phones to upload photographs of their damaged fields, which will not only provide an idea of crop loss but also geographical location of the field and details of the farmer.

Provide rightful relief

The government should improve its relief and compensation policy, which at present is non-existent or only on paper, says Yadav.

In case of a natural calamity, state governments distribute 10 per cent of their disaster relief funds among the affected farmers. More often than not, they receive only a sum '20-100. There is no clarity over how the relief amount is decided. Criticising the arbitrary nature of the policy, T. N. Prakash of the Karnataka Agriculture Price Commission, says the government should link relief money with the minimum support price of the damaged crop. "This should be disbursed on an urgent basis so that the farmer can use it to grow the next crop," he says.

While crop insurance should offer safety net to the farmer, it is often twisted in favour of banks and insurance companies. Banks act as agents to insurance companies and cleverly insure the crop loan amount. As a result, when a farmer claims insurance, the bank first deducts the loan amount from the insurance money and disburses the rest. Experts present at the consultation programme thus suggest delinking crop insurance from bank loan.

They also recommend that the governmet.1tshould introduce universal crop insurance for all farmers. "The first tier of insurance should be meant for marginal farmers in which the government should bear the total actuarial premium. The second tier of insurance should be made voluntary for small and big landholders, in which both the government and the farmer should share the premium," Yadav suggests.

Crop loss and insurance compensation should be made justifiable to make it lucrative. For instance, suggests V M Singh of Rashtriya Kisan Mazdoor Sangathan, in extreme weather conditions, banks should waive off a sizeable loan amount, instead of deducting loan amount from insurance money. Experts also suggest introducing weather-based insurance schemes instead of crop-based insurance. To protect the interest of tenant farmers, they suggest introducing

legislation on the line of Andhra Pradesh's Licensed Cultivators Act, under which all tenant farmers in the state are given identity cards so that they can avail relief and compensation in case of crop loss.

On the occasion, CSE released a report "Lived Anomaly", describing how to enable Indian farmers to cope with extreme weather events.

DOWN TO EARTH,
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New Irrigation
Strategies for the Future

R. K. Sivanappan

1. Introduction

Land and Water are the basic needs for agriculture. Though both resources are fixed or constant, the cultivated land area (gross area) can be increased by 2 to 3 times, if the intensity, if cultivation is stepped up from the present 120% to 200-300%. But this is possible only if water/ moisture is made available to take crops for the 2nd and 3rd time in an year in the same field. It is expected that the entire available water resource of about 109.50 M.H.M., will be harnessed in the next 10-15 years. The total irrigated area at the time (2025 AD) will be about 75% of the gross cultivated area of 210 MHa.

The total agricultural production from about 165 MHa is only around 250M. tons which means the average yield per hectare is about 1.50ton whereas in China, the average yield per hectare is about. 4 tons. India has to produce about 450 to 500 MT. by the end of the century to feed the expected population of about, 1690 million at that time. Therefore higher productivity per unit per area and bringing more area under irrigation should be achieved to solve the food problem in the future.

The importance and scarcity of water could be seen from the fact that on global level the per capita availability of water is about 10,000 cubic meter per year whereas in India, it is only about 2000 cubic meter per person per year. This quantity will be proportionately reduced in the coming years as the population is increasing steadily especially in India. However the minimum requirement of water for a reasonable living including irrigation, industry and household purposes is about 1000 cubic meter/ person / year. It shows that there is an urgent need to conserve and use the water to the maximum efficiency.

Irrigation presently claims more than, 90% of the water available in the country. It is estimated that the allocation of water to agriculture will be reduced to about 70% in the next 10-15 years since the demand of water for industries and municipal needs is expected to increase substantially. Since agriculture takes bulk of the nation\u2019s water budget, saving even a small percentage means a large amount of water to meet other needs. The irrigation efficiency in the major irrigation projects have been estimated at about 35% - 40% and by raising the irrigation efficiency by 10%, enough water would to be saved to supply for the needed areas.

2. Need for economic use of water

It has been recognised that among the basic factors of Agricultural productivity, adequate (not excess) and timely provision of irrigation water is crucial. The development of irrigation is given top priority in Indian economy as agriculture contributes about 20% of Grass National Product (GNP). The overtone of irrigation also arises due to the fact that over 70% of the people live in rural areas of which more than 70% are directly or indirectly dependent on agriculture for their livelihood. Further the Investment per hectare in irrigation project has been rising enormously in the last 5-10 years and it will be more in the coming years due to escalation of prices. The cost was about Rs. 1500/ hectare during the First Plan period and now it is between 1.50 to 2.0 lakh per hectare. Hence it is necessary to adopt modern methods to economise the use of water, to increase productivity and to bring more areas under irrigation. This will not only increase the production needed, but also minimize the hazards of water logging which bring large areas under salinity and alkalinity every year.

3. Water resources availability and utilisation

India is blessed with good rainfall and water resources, still the scarcity is felt everywhere not only for agriculture but also for drinking purposes. The average annual rainfall is about 1150mm compared to world average of about 840 mm. The sunshine is also favourable to take crops throughout the year, but the every-growing population demand the optimum utilisation of the fixed land and water resources of the country. It is estimated that the average annual surface flow is about 195 MHM of which only about 69 MHM is harmessable/ utilisable due to the terrain conditions, rain during a few months, suitable sites for dams are limited and due to political reasons. Similarly, the annual recharge of ground water is estimated at about 43 MHM and the utlilisable amount is about 39.5KHM.

As regards ground water, the utilisable amount depends not only on the quantity of water available, but also on its quality. At the same time, not all this water (79+39.50=108.50) i.e., 108.50 MHM would be available for irrigation as there would be demands for other purposes like municipal, industries including thermal, nuclear power, recreation etc. Through the irrigated area in 1950-51 was only about 21 MH, this has been increased to about 100 MH at the end 11th plan (2011). The entire utilisable water will be harmessable by 2020/25 AD. But in many

States like Tamil Nadu, the entire water resources already have been fully utilised, but the percentage of irrigation is only about 50. In States like Maharashtra, Karnataka and Gujarat, even after utilising the entire available water, the percentage of irrigated area to sown areas will be less than 40%.

4. Increasing water supply to cater to needs

The increasing scarcity of water and its implication for the economy of the country have become the most concern of the Government and it may be expected that this will increase in the years to come. The lessons derived from the study of the present situation show that only by investing a major effort in water saving, it will be possible to maintain a reasonable growth rate of that part of the national income dependent on irrigated agriculture in the areas where water is a limiting factor. Hence there is an immediate need to find out ways and means to increase the water supply. Since rainfall is constant, the alternatives are desalination, saltwater utilisation, re-use of wastewaters, weather modification and improved water management practices or new irrigation strategies.

5. Water management practices

The following are the new irrigation strategies which can be introduced to overcome the problem discussed above:-

a) Proper method of irrigation canal and tank command areas. specially for paddy.

b) Providing drainage and re-use of drained water if it is suitable.

c) Conjunctive use of surface and ground water.

d) Using sprinkler irrigation in canal/tank command areas for closely spaced Millets and commercial Crops.

e) Introducing drip irrigation in well irrigated areas for-wide spaced high value crops

f) Micro irrigation for closely spaced crops like sugar-cane, vegetables, cotton etc., by adopting crop gomentry (Paired row method).

g) Introducing the concept of supplemental irrigation / protective irrigation even for dry land crops to increase the yields.

h) Irrigation based on Water/ fertiliser production function curves.

i) Training the farmers and extension· officers on water management.

j) Conducting Seminars/workshops in villages to bring awareness to all farmers in villages.

k) Demonstration / Pilot Programmes in the farmers' field to use water judiciously such as:

l) Proper Method of Irrigation in Canal Command Areas specially for paddy.

In major irrigation projects, water is flowing continuously and the farmers use as much water as possible without understanding the adverse effect of over irrigation. In many cases, they do it? So they are not sure whether they can get water for the next irrigation. in many projects especially in the Southern States, the ayacut is fixed and canals are designed taking the duty (water requirements) as 40-60 acres/cusec for paddy and 80-100 acres / cusec for dry crops. It is observed that the farmers use about 1500-3000 mm of water for paddy though the consumptive requirement is only about 800 mm. Unless, the design of the channel and concept of duty are changed, it is not possible to economise the use of water. Since paddy crop consumes about 45% of the total agricultural water in the country and about 70% - 75% of the water in Tamil Nadu State, it is necessary to introduce the water saving method of irrigation, which means irrigating only to a depth of 3-4 cm as soon as the standing water disappears in the field. It is also suggested that the channels should have proper water control structures to regulate and supply water. SRI Method is the latest technology for Paddy irrigation to save water and to increase the yields.

(ii) Providing Drainage and Re-use of Water

Irrigation and drainage are like the two eyes of human beings. These two are complimentary to each other. But in most of our irrigation projects, drainage channels are either not provided or inadequate. This results in water logging and the land hugs saline / alkaline. The delta lands of I e in Egypt and the river in Vietnam have been provided with good drainage and if drainage water is found good, is again re-used for irrigation; otherwise the bad quality of water is pumped into the sea. Action may be taken in this direction to obtain more yield and to eliminate water logging problems.

(iii) Conjunctive Use of Surface and Ground Water

In many tanks / canal command areas, groundwater is not used for crops. But at the same. But at that time, the water table is always very near or at the ground level, thus affecting the crop growth and yield. To maintain ground water table at least 6 to 7 feet below ground level, the farmers should have their own well and pump the water for irrigation. In the Nile delta of Egypt, the charm I itself is taken 3-4 feet below the ground level purposely so that the farmers can irrigate their lands by lifting / pumping only by pumping. Further, controlled irrigation will minimise the water use of the crops and different crops can be grown at a time. It is therefore recommended that the Government should encourage river pumping schemes rather than canal irrigation schemes at least in the future.

(iv) Using Sprinkler Irrigation in Canal/Tank Command Areas.

Studies have shown that water saving is about 30-40% in sprinkler irrigation. It is time now to introduce this method for all closely spaced crops like millets, groundnut, pulses, wheat etc. Though late, the Central Board of Irrigation has initiated steps to take up research in this direction in recent years by sponsoring research projects in various institutions such as universities even for rice crop.

(v) Introduction Drip Irrigation in Areas irrigated from wells.

Wells contribute about 40-45% of the area under irrigation. In many places, the water table is either steadily depleting or wells completely dried up. Drip irrigation method which is very well suited for all row crops especially for wide spaced crops can be introduced in these places. Studies have indicated that in the drip method the saving of water is about750-70o/a and-. yield about 10-100% for various-crops.- This new method has great scope especially in South India.

(vi) Drip with paired row Irrigation for Sugarcane, Vegetables, Cotton etc.

Paired row irrigation is extensively used in Drip with many parts in Tamil Nadu. This advanced technology is now available to Indian farmers. This system is very well suited to all close-growing row crops such as sugar-cane, cotton, vegetable, grapes, pine apple, onion to reduce cost of drip system. This method not only saves about 50-70% of water used, but also increases the yield by about 10-100%. One farmer in Kopergoan, Ahamed Nagar District, Maharashtra State has obtained an yield of 50 Tonnes of Tomato in one acre of land by introducing this technology.

(vii) Introducing the Concept of Supplemental/ Protective Irrigation in dry land cultivation

Soil and Water Conservation and Management practices should be implemented on watershed basis. In addition, the aim should be to provide one/two supplement/ protective irrigation when the crop needs in dry land cultivation. Wells may be provided in the watershed, based on the availability of ground water and made to give supplemental/or Protective irrigation by sprinkler/ drip methods. This will enhance the yield of dry land crops.

(viii) Irrigation based on Water and Fertilizer Production Function Curves

To allocate water efficiently for use in crop production, it is necessary to know the relation between water requirement and the yields of various crops for given climatic conditions and given levels of other essential input i.e., fertilizer. Scientists have worked out the response curves for water and fertilizer and based on the results, water can be allocated to obtain more yield from unit quantity of water and fertilisers. This information can be used to determine how much area of what crop may be optimal to plant fertiliser with given supplies of water.

(ix) Training Farmers/ Extension Officers.

Training in water management may be given to the farmers based on their need and to the extension officers to know and to understand the various research findings in water management.

(x) Conducting Seminar and Workshop

To get the problems solved, to disseminate the research findings on various irrigation methods, and to bring awareness of the scarcity of water and use it efficiently, it is necessary to organise seminars / workshops for all the category of personnel at appropriate levels in Villages and block Head Quarters.

(xi) Pilot and Demonstration Farms

Since irrigation is as old as civilisation, it is difficult to change the attitude of many planners from the present concept applying more water than required especially when water is available in plenty in canals, tanks or wells. It is necessary to have number of demonstrations / pilot plots in the farmers' fields based on the research findings for various irrigation methods for various crops. Once the farmers are convinced about the advantages / economics of the new technology, this will be taken up by then without any hesitation.

KISAN WORLD,

DECEMBER 2015.

THE LEGISLATIVE BODIES IN SESSION DURING THE MONTH OF DECEMBER 2015

Sl. No.	Name of Assembly/Council	Duration
1.	Loksabha	26.11.2015 - 23.12.2015
2.	Rajyasabha	26.11.2015 - 23.12.2015
3.	Andhra Pradesh Legislative Council	17.12.2015 -
4.	Andhra Pradesh Legislative Assembly	17.12.2015 -
5.	Assam Legislative Assembly	7.12.2015 - 11.12.2015
6.	Bihar Legislative Council	30.11.2015 - 08.12.2015
7	Bihar Legislative Assembly	30.11.2015 - 08.12.2015
8.	Chhattisgarh Legislative Assembly	16.12.2015 - 23.12.2015
9.	Delhi Legislative Assembly	18.11.2015 - 04.12.2015
10.	Himachal Pradesh Legislative Assembly	30.11.2015 - 04.12.2015
11.	Jharkhand Legislative Assembly	15.12.2015 - 22.12.2015
12.	Odisha Legislative Assembly	01.12.2015 - 26.12.2015

Site Address of Legislative Bodies in India

Sl.No	Name of Assembly/Council	Site Address
1.	Loksabha	loksabha.nic.in
2.	Rajyasabha	rajyasabha.nic.in
3.	Andhra Pradesh Legislative Council	aplegislature.org
4.	Andhra Pradesh Legislative Assembly	aplegislature.org
5.	Arunachal Pradesh Legislative Assembly	arunachalassembly.gov.in
6.	Assam Legislative Assembly	assamassembly.nic.in
7.	Bihar Legislative Assembly	vidhansabha.bih.nic.in
8.	Bihar Legislative Council	biharvidhanparishad.gov.in
9.	Chhattisgarh Legislative Assembly	cgvidhansabha.gov.in
10.	Delhi Legislative Assembly	delhiassembly.nic.in
11.	Goa Legislative Assembly	goavidhansabha.gov.in
12.	Gujarat Legislative Assembly	gujaratassembly.gov.in
13.	Harayana Legislative Assembly	haryanaassembly.gov.in
14.	Himachal Pradesh Legislative Assembly	hpvidhansabha.nic.in
15.	Jammu and Kashmir Legislative Assembly	jklegislativeassembly.nic.in
16.	Jammu and Kashmir Legislative Council	jklegislativecouncil.nic.in
17.	Jharkhand Legislative Assembly	jharkhandvidhansabha.nic.in
18.	Karnataka Legislative Assembly	kar.nic.in/kla/assembly
19.	Karnataka Legislative Council	kar.nic.in/kla/council/council

20.	Madhya Pradesh Legislative Assembly	mpvidhansabha.nic.in
21.	Maharashtra Legislative Assembly	mls.org.in/Assembly
22.	Maharashtra Legislative Council	mls.org.in/Council
23.	Manipur Legislative Assembly	manipurassembly.nic.in/
24.	Meghalaya Legislative Assembly	megassembly.gov.in/
25.	Mizoram Legislative Assembly	mizoramassembly.in
26.	Nagaland Legislative Assembly	http:/nagaland.nic.in
27.	Odisha Legislative Assembly	odishaassembly.nic.in
28.	Puducherry Legislative Assembly	www.py.gov.in
29.	Punjab Legislative Assembly	punjabassembly.nic.in
30.	Rajasthan Legislative Assembly	rajassembly.nic.in/
31.	Sikkim Legislative Assembly	sikkimasembly.org
32.	Tamil Nadu Legislative Assembly	assembly.tn.gov.in
33.	Tripura Legislative Assembly	tripuraassembly.nic.in/
34.	Uttar Pradesh Legislative Assembly	uplegassembly.nic.in
35.	Uttar Pradesh Legislative Council	upvidhanparishad.nic.in
36.	Uttarakhand Legislative Assembly	ukvidhansabha.uk.gov.in
37.	West Bengal Legislative Assembly	wbassembly.gov.in/
38.	Telangana Legislative Assembly	telanganalegislature.org.in