

DEMOGRAPHIC DIVIDEND AND DEMOGRAPHY- DEVELOPMENT LINK

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At present, a number of developing countries including India are passing through a phase of demographic transition wherein they can derive a number of potential benefits from their growing population by virtue of the population having tilted in favour of relatively younger and working age-groups. As these younger people can earn as well as save more, it is generally expected that they can contribute more to the generation of national income by enhancing the productive potentiality of the economy through increased saving and hence investment thereby leading to a higher level of economic growth and development. This kind of an optimism should not however be taken to be a matter of foregone conclusion in as much as the deriving of such a 'demographic dividend' crucially hinges on the provision of requisite skills & training as also sufficient employment opportunities to the increasing number of young economic agents entering the potentially working age groups in the concerned economies. Given the large-scale unemployment and poor skill formation prevalent in these economies, there is always a danger and apprehension that the potential of a demographic dividend could either go waste altogether or may only remain incompletely exploited. In the light of all these apprehensions, the present article takes a closer look at the overall link between demographic trends on the one hand and developmental patterns & outcomes on the other so as to identify the crucial factors that must be taken care of by these economies in order to fully reap the 'demographic dividend' with a view to achieving economic growth, prosperity and welfare of the masses.

INTRODUCTION

The link between population trends or demography on the one hand and economic development on the other has come to the centre-stage of development debates in recent years in view of the possibility of a 'demographic dividend' that some developing countries including India could potentially derive in the years to come. The main points of debate and areas of discussion in this respect are not only the underlying reasons for which only a selected few countries are capable of deriving such a dividend emerging out of demographic trends but also the requisite conditions under which it would indeed

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materialise in actual practice. In this connection, it must be conceded that 'demographic dividend' is not a matter of foregone conclusion and even those economies which can potentially derive it may fail to do so in case they falter on developing the enabling environment conducive to availing of such a dividend.

In order to have a better understanding of what precisely constitutes demographic dividend, in what kind of economies it could accrue and what are the underlying conditions and assumptions under which it would fructify, it is imperative to have a closer look at the demography-development link. It is against this backdrop, that the present article goes deeper into an analysis of the inter-linkages between population trends *i.e.* demography of an economy on the one hand and the process of its growth & development on the other. The purpose is to derive useful insights into the ways and means through which the vast pool of human resources in the economy could be effectively harnessed for achieving economic growth and development so as to improve the general welfare of the masses.

The next section explores the fundamental issue whether population growth is a boon or in fact a bane for an economy. A detailed investigation of this issue calls for having a closer look at the basic demography-development link which in turn is accomplished in the subsequent section. Once the inter-linkages between the demographic profile of an economy and the process of its economic development are thoroughly analysed in this manner, the stage is set to fully understand the intricacies as also the pros & cons of 'demographic dividend' which form the subject matter of next section. This is followed by a detailed discussion in the subsequent section about the ways and means of ensuring that the demographic dividend is fully reaped by the concerned economies. And finally, the conclusions following from the present study are recorded in the last section.

Population Growth: Is it a Boon or a Bane?

There is no denying the fact that labour is one of the most important factor of production in the economy. In fact, in Marxian literature, all value is supposed to belong to labour alone. In any case, the importance of labour is recognised by any economic theory in as much as even capital resources such as machinery and equipment are essentially 'reproducible' in the sense that in the ultimate analysis they too are man-made. It is actually when human beings act on nature and 'invent' as also 'innovate' that the foundation of all progress in the society is laid down. No technological advancements can take place without human intellect and human effort and hence economic growth

and development are inconceivable without human beings. In view of this, increasing population of human beings appears to be beneficial for any economy from the perspective of economic development as more human beings could mean more human resources, more human brains and more human capital.

Yet we find that higher population growth in an economy is generally viewed with contempt and is considered to be a major barrier rather than facilitator in economic development. For, the population of a country can rise rapidly if and only if birth rates are high and death rates are low or both these developments take place simultaneously reinforcing each other. Both ways, the proportion of too young *i.e.* less than 15 years of age and too old *viz.* more than 64 years goes up in the entire population and conventionally these age-groups are considered to be non-working age groups. Though not earning, the consumption expenditures of households on these age-groups generally tend to be relatively higher as they need comparatively more medical & health care and in the case of too young *i.e.* less than 15 years, expenditures incurred on schooling & education is an added factor. This clearly implies that when population in an economy grows, the 'burden of dependency' rises in the sense that non-working and non-earning age groups having on an average higher consumption expenditure go up as a proportion of the population. As these age groups merely add to consumption expenditures while their contribution to income is practically negligible, the overall impact is a dampening of the 'Saving rate' in the economy. In the absence of requisite savings, evidently the level of investment is curtailed thereby having a more than proportionate loss of national output in terms of the 'opportunity cost' argument due to the standard multiplier effect. To put it simply, increasing population acts as a brake on the growth tempo of the economy by discouraging saving and investment and adversely affecting the productive potential of the economy under consideration.

In addition to such a 'Saving Effect', a growing population could also be detrimental to growth and development on account of altering the 'Composition of Investment' in a relatively unproductive direction. More specifically, when population in an economy grows unabatedly, a large part of public investment is devoted to the building up of social infrastructure and carrying out welfare programmes aimed at providing for education and health facilities to the growing masses. Though such expenditures are a must from the viewpoint of 'human development', yet it must be realised that they do not contribute to the generation of national income as significantly and as fast as some directly productive activities such as steel, cement, chemicals industry and the like that are considered to be

the 'prime movers' behind growth due to their strong *forward and backward linkages* with the rest of the economy. Human development too would, no doubt, contribute to the growth process of the economy in due course *via* raising productivity and bringing about human resource development, but the point to be noted here is that the same or even higher level of human development itself can be achieved with the same amount of resources in an economy in case the growth of population is somehow reduced.

In the light of the foregoing arguments, it becomes a subject matter of a continuing debate whether population growth is a boon or in fact a bane for an economy. In the case of poor and developing countries, it is often alleged that increasing population constrains economic development by acting as a major impediment to the growth process of the economy. In sharp contrast, in the case of advanced developed economies it is widely acknowledged that it is growing population that serves as a human resource and even human capital thereby contributing significantly to the process of economic growth and development.

This apparently paradoxical observation evidently raises the fundamental question that why is it so that population acts as an asset in developed economies and a burden or drain in the case of developing economies. In order to address this moot question so as to resolve this paradox, it is imperative to have a closer look at the complex inter-linkages between demography or population trends of a country on the one hand and the process of its economic development on the other. For, it is quite conceivable that certain underlying socio-political, cultural and economic factors peculiar to poor developing economies could be preventing the growing human population from serving as resources unlike the developed economies wherein the socio-economic and politico-cultural environment is quite conducive for the population to serve as human resources and human capital.

Another related issue worth exploring is how to break this 'vicious cycle' in developing economies and convert it into a 'virtuous cycle' as witnessed in the case of countries belonging to the developed world so that even the developing world could reap the potential benefits arising from their growing population to achieve prosperity and welfare.

The Demography-Development Link

At the very outset, it must be conceded that the link between population trends and economic development is one of *interdependence* rather than being unidirectional. That

is to say, as opposed to the popularly held view that the population pattern or demography of a country shapes its development scenario, it is equally valid to contend that the stage of development itself has a significant bearing on the demographic profile of an economy. Thus, rather than looking at it as a one-way causality, it would be more appropriate to assert that demography and development are mutually inter-linked in a complex fashion.

The fact of the matter is that every economy over its era of economic development typically passes through broadly three stages of *demographic transition* as observed in the case of present-day developed countries over their own era of economic development. More specifically, in the first stage when the country is underdeveloped, both the birth rates and death rates tend to be very high as a result of which the rate of growth of population remains rather low as high fertility rates are offset by high mortality rates. When the economy starts developing, however, the fertility rates and birth rates continue to remain high but the mortality or death rates suddenly decline due to which population starts growing at such a rapid pace that it can be reasonably regarded as a kind of 'population explosion'. For instance, after the year of the great divide *i.e.* 1921, the Indian economy has entered into the second stage of demographic transition thereby experiencing a spurt in its population growth. Curiously enough, the rate of growth of population in India during the immediately preceding decade *viz.* 1911-21 was in fact negative on account of the influenza epidemic observed during the concerned period.

In fact, the drastic fall in death rates in a relatively short span of time as witnessed during the second stage of demographic transition is itself attributable to rapid advancements in the fields of medicinal technology as also transportation & communication by virtue of which episodes of large-scale mortalities say on account of *epidemics* and *famines* can be effectively brought down. As the fertility and birth rates are slow to respond, the net outcome is a sudden rise in the growth rate of population. It must be realised that this phenomenon is not peculiar to only the developing countries of today but even the so-called developed countries of contemporary world essentially belonging to the continents of Europe and America have passed through this phase over their passage of economic development. Thus there is no need to be alarmist or put undue blame on the present-day developing countries for excessive growths in their population as similar rates of growth of population were registered even in the developed world when its countries were themselves developing.

According to some scholars, the allegations and objections raised against high population growth of present-day developing economies by developed countries are essentially dictated by dual standards and an apprehension of political dominance coming out of large numbers. For, in international fora, owing to their growing numbers the developing world could collectively be more vocal and may seriously question as also challenge the hegemony of the western world thereby threatening and jeopardising the vested interests of the developed world. In this connection, following a third-world perspective, Ray (2012) comes in the defence of the developing countries by claiming that in a historical perspective the developing countries have not grown more than their "fair share" *vis-à-vis* the developed economies and any apprehension or scepticism raised by latter in this respect is governed by the scare that on the international scene, a large population amounts to greater political and economic power.

On closer examination, however, we find that such arguments in favour or defence of the developing world notwithstanding, the developing economies must nevertheless do an *introspection* as to why it is taking so long for the birth rates to decline in them. For, according to the theory of demographic transition based on the actual demographic experience of the contemporary developed world, the second stage of 'population explosion' is invariably followed by the third stage wherein just like the death rates, even the birth rates tend to fall thereby lowering the overall growth rate of population and the country becoming developed in nature. In the light of this empirical observation, it is obviously intriguing to investigate as to why the countries belonging to present-day developing world largely belonging to Asia, Africa and Latin America are taking so long in switching from the second to third stage of demographic transition. In other words, why is the process of economic development getting delayed in the case of developing countries of today is an issue worth exploring.

It must be realised that the rate of growth of population tends to be 'low' both in the first as well as the third stage of demographic transition even though in the first stage the country remains underdeveloped whereas the third stage connotes the state of being a developed economy. This anomaly can be easily explained by referring to the fact that the developmental state of a country is related more to the underlying reasons behind an apparent demographic trend rather than that trend *per se*. More specifically, the low rate of population growth during the first stage is essentially attributable to high death rates whereas in the third stage of demographic transition, it essentially comes into being on account of low birth rates. Evidently, a developed economy must have a high life

expectancy at birth and this is only possible when death rates are low as happens indeed during the third stage unlike the first stage of demographic transition. Thus it follows that an economy can enter into the stage of being developed if and only if mortality or death rates are low along with a low growth rate of population and this in turn can come about only when birth rates too are low. It is against this backdrop that it becomes all the more desirable to identify and rectify the root cause of delays in birth rates to fall in the case of present-day developing countries despite the death rates having already fallen owing to rapid advancements in science & technology in general and medicinal technology in particular.

In this context, it is worth noting that a fall in fertility rates is at best only a *necessary* but not a *sufficient* condition for ensuring a decline in birth rates in an economy. This is largely because fertility rates refer to the average number of children born to a woman throughout her life. But birth rates at any juncture in an economy are not just related to the average number of children born to a woman but also depend upon how many women on an average are giving birth to children over any point of time. Thus it is quite plausible that through deliberate efforts on the part of planners and policy makers, fertility rates are somehow brought down in an economy yet the birth rates may continue to remain high as the number of women in potentially reproductive age groups may have gone up. This for instance is likely to happen in an economy wherein the age structure of population has got tilted towards the younger age groups.

As a matter of fact, for an economy passing through the second stage of demographic transition, such a situation is bound to come sooner or later. For, the very fact that population is growing at a rapid pace due to high birth rates during the second stage signifies that the proportion of younger age groups in the population is rising which in due course would definitely tilt the age structure of population in favour of the young. Once this happens, there will be a lagged effect of birth rates to respond to falling fertility rates and in the intervening period, population of the concerned economy will continue to rise at a rapid pace so much so that it could be virtually compared to a population explosion. This could be one major reason accounting for the inability of contemporary developing countries to smoothly switch over from second to the third stage of demographic transition.

But by far the most important barrier faced by developing countries in their smooth transition to the stage of development is their failure in lowering the fertility rates themselves not to speak of lowering the birth rates and thereby population growth! And

this failure is in turn attributable to the socio-political and cultural environment which is by and large prevalent in poor developing economies.

First of all, as opposed to the developed world wherein progeny is desired essentially for its *intrinsic value* or worth, a large majority of people in the developing countries look forward to their offspring more as an *instrumental value* or means for providing social security in their old age. This differential in the respective treatment of children across developed and developing world primarily arises out of the existence of certain institutions in the developed countries such as the provision of social security by the State or employer that are practically non-existent in developing countries. Surprisingly enough, the existence of certain other institutions such as the joint family system that are more prevalent in the developing world rather than the developed world tend to reinforce this tendency of treating children as an end in themselves in developed countries and more as a means towards achieving an end *viz.* old age support in the case of developing countries.

To be specific, the fertility decisions of a household in the developed countries are not conditional on the ability of progeny to serve as a social safety or support mechanism in their old age. For, such a social security is generally provided by the government as a *welfare state* as also the employer in the form of pensions and provident funds in all such economies. In the case of poor developing economies, however, as a large part of the workforce is employed in the unorganised and informal sector, such social safety support from the side of employer is largely lacking. Further, even the governments of such economies usually fail to effectively perform the social welfare function on account of a multiplicity of factors ranging from serious resource constraints to inefficiency, red-tape and corruption. Under these circumstances, the poor masses living close to subsistence level in developing countries are left with no option but to seek recourse to their offspring to look after and financially support them in their old age when they will fail to earn on their own.

Once the people in poor and developing economies decide to choose their progeny as a social security mechanism for old age in this manner, they tend to have high fertility rates on account of numerous institutions and social practices the most prominent among them being the joint family system and social orthodoxy. More specifically, the joint family system tends to lower the average costs of upbringing children especially the implicitly borne costs in terms of opportunity cost of time spent in looking after children. For, unlike a nuclear family, a “cushion” so to say is provided by the availability of

grandparents on the one hand and young uncles and aunts on the other to take care of children in a joint family who render this job free of cost out of love, affection and family ties. As these helping hands in looking after children are typically outside the conventionally defined 'working age-groups', their opportunity cost can be reasonably considered to be close to 'nil' for all practical purposes and thus the resulting cost-saving aspect tends to *ceteris-paribus* induce households to have larger families.

The degree of urbanisation is a related factor in as much as other things remaining the same, the cost of upbringing children tends to be higher in urban areas and thus increasing level of urbanisation is likely to lower fertility rates. Moreover, in urban areas, female participation in workforce may be induced due to the higher costs of living in general. To the extent this factor is prominent, the opportunity cost of taking care of children on the part of the mother will go up thereby discouraging households to have higher fertility rates. In view of this, the extent of urbanisation could be reasonably considered as a 'correlate' of declining fertility in its own right. In this context, Dyson (2008) admits that urbanisation has *facilitated* the reductions in mortality and fertility that are integral components of the demographic transition.

In this respect, however, certain social customs and orthodox practices often play a counterproductive role in the case of poor and developing countries thereby giving a further fillip to the rate of growth of population. For instance, social norms discouraging women from working outside the household and treating the upbringing of children as the sacrosanct duty of only the womenfolk are the cases in point that lead to a continuation of the *status quo* thereby keeping population growth at a higher level in the case of less developed and developing countries. In some cases, dictated by this social orthodoxy, yet another malpractice is observed whereby females are paid lower wages *vis-à-vis* their male counterparts for the same kind of job and same productivity at the margin! Such differentials in wages of male and female workers evidently lower the opportunity cost of upbringing children on the part of the mother and discourage female participation in workforce. In this context, it is noteworthy that according to Drèze and Sen (2013), in India as a whole, and especially in its 'northern heartland', women's participation in the workforce has been stagnating at very low levels for decades.

Paradoxically enough, the commitment of governments in developing economies to social welfare activities such as the provision of health and education at times works in the direction of raising fertility rates by lowering the costs of upbringing children

thereby practically adding fuel to fire on the front of population control. The rationale underlying this contention is that when guided by its welfare motives, the governments in concerned economies try to provide free primary education or preventive & curative health care to the children either free of cost or instead at highly subsidised rates, at least a part of explicit costs in upbringing children is paid out of public exchequer rather than the households. This obviously gives an incentive to potential parents to go in for larger families thereby complicating the job of population policy aimed at controlling excessive growth of population in such economies.

In the light of this possibility, it directly follows that instead of short-term welfare programmes and populist policies guided by vote-bank politics, the governments in poor and developing economies shall aim their development policies at providing social security to the masses for their old age through the provision of say 'old age pensions' so as to meet their basic minimum needs when they will fail to earn on their own. This way, people will look forward to State assistance rather than their progeny as a 'social security mechanism' for their old age thereby putting a check on their fertility rates.

Once this is accomplished, the root cause of excessive fertility rates in the case of developing countries will wither away. For, it is a well acknowledged fact that so long as potential parents rely on their offspring for financial support in their old age, they face numerous uncertainties which in turn induce them to have still higher and higher fertility rates. To be specific, for availing financial safety from the side of children, the first thing parents wish to ensure is that the child must survive at least till the parents are themselves alive. Given the high incidence of disease & malnutrition among children and very high 'Infant Mortality Rates' in the case of less developed and developing countries, the parents are particularly apprehensive on this count and in order to play safe in this regard, they end up having higher fertility rates than required otherwise. Even so, the problem is further compounded by the 'Gender bias' prevalent in their orthodox societies whereby females are discouraged to financially support their parents after marriage. Deprived of social support for old-age through government & institutional channels and having been prevented from seeking financial support from their daughters in this manner, the poor people in such conservative societies tend to develop a preference for the 'male' child as the only source of support in their old age which in turn is responsible for giving a further boost to fertility rates in poor developing economies.

In view of the low-income levels and large-scale unemployment prevalent in poor

economies, potential parents typically have yet another apprehension that even if children survive, they may not be able to earn enough to properly look after them in their old age. For, it is worth noting that following the same line of reasoning adopted by their parents, when children would grow up in such economies, they too will have to look after a large number of children as a support mechanism for their own old age apart from financially supporting their own aging parents. Under these circumstances, it is quite conceivable that some children may either shy away from this responsibility of looking after their parents or may simply not be in a position to bear the financial burden imposed in this proposition due to poor income levels or even inability to find any meaningful employment. This possible reluctance of children to take care of aging parents on any count in turn induces potential parents to have higher fertility rates on the ground that in order to meet all these eventualities, having more children is always a better bet than having less of them. For, with more children, there is more likelihood that at least some of them would be ready to financially support their parents in old age and if not at the micro level, at least collectively the children would be able to pool together their funds to collectively bear the costs of looking after their aging parents.

It is thus clear from the foregoing discussion that at the very root of higher fertility rates in poor, less developed and developing economies, lies the absence of social security for old age as perceived by potential parents employed in informal and unorganised sectors which in turn induces them to have a larger number of children on the underlying belief that at least some of them would be in a position to collectively meet their basic minimum expenses in their old age. What this essentially implies is that the only long-term solution before the governments of poor and developing economies to control high fertility rates is to break this vicious cycle by providing social security through old-age pensions and similar such schemes so that poor do not have to seek recourse to the financial help provided by progeny in their old age. Once this is accomplished, the concerned economies will be in a position to achieve 'optimal' growth rates of population by registering a decline in fertility rates and eventually a fall in their birth rates thereby switching over from the second to the third stage of *demographic transition* which in turn connotes the stage of being a developed economy.

Demographic Dividend: Is it a Matter of Foregone Conclusion?

'Demographic Dividend' seems to be the buzzword nowadays in as much as everybody seems to be talking about the tremendous growth potential of some developing

economies including the Indian economy on account of a higher proportion of relatively younger age groups in the population. More specifically, developing economies like India are currently passing through a phase of demographic transition wherein owing to high birth rates in the recent past, the age-distribution of population has got tilted in favour of the young but above 15 years. As people in the age group of 15 years to 64 years are conventionally considered to be the *working age groups* whereas those lying outside this range are treated as *dependents*, it is expected that such a demographic development will not only reduce the 'burden of dependency' in the economy but could quite conceivably raise the generation of national income through the contribution of increasing number of those belonging to the working age group. The net outcome of this is an increase in 'saving rate' and thereby investment in the economy which is likely to raise the rate of economic growth through an increased production potentiality and the standard multiplier effect. This is indeed what constitutes the 'demographic dividend' which India and other such developing economies in their current phase of demographic transition could potentially derive in the near future.

In sharp contrast, as the countries belonging to the continents of Europe and America which are considered to be a part of the present-day developed world have by and large comparatively aged and aging populations, they are evidently not in a position to derive any such dividend from demographic trends in the times to come. This becomes clear from a glance at TABLE-1 wherein the estimates and projections of population lying in the potentially working age-group of 15 to 64 years are presented for a set of four selected countries *viz.* India, China, United Kingdom and United States of America after periodic intervals of 5 years over the entire sample period of 2000-2050.

As is evident from TABLE-1, right since the year 2000, the proportion of working age groups *i.e.* 15-64 years continues to steadily rise in the case of India till the year 2030 so much so that there is a net increase in it by 5.6 percentage points from 62% to 67.6%. Such a demographic trend in turn connotes a corresponding reduction in the 'burden of dependency' thereby signifying that starting from the year 2000, Indian economy has been in a position to derive a *demographic dividend* which is likely to accrue at least till the year 2030 in India.

Likewise, China too was in a position to derive such a dividend arising out of its demographic trends but as is amply clear from TABLE-1, beyond the year 2010 the 'demographic dividend' starts dwindling there. For, after reaching a peak of 73.4% in

2010, the proportion of working age groups in total population of China continuously falls to eventually reach a projected level of just 59.5% by the year 2050. This implies that the process of population getting tilted in favour of younger age groups must have started much before in the case of Chinese economy *vis-à-vis* the Indian economy. As a result, India can continue to derive the demographic dividend for two more decades beyond 2010 when such a dividend starts dwindling in the case of China.

Table-1 Proportion of Working Age Groups of 15 to 64 years in Total Population

Year	India	China	United Kingdom	United States of America
2000	62%	68.1%	65.3%	66.2%
2005	63.2%	71.7%	66.2%	67.1%
2010	64.6%	73.4%	66.3%	67.1%
2015	66%	72.9%	64.9%	65.9%
2020	67%	70.6%	63.9%	64.2%
2025	67.5%	69.2%	63.1%	62.2%
2030	67.6%	67.6%	61.9%	61%
2035	67.4%	65%	61%	60.7%
2040	66.9%	62.6%	60.9%	60.9%
2045	66.2%	61.3%	61.1%	61.2%
2050	65.5%	59.5%	60.8%	61.1%

(Source: United States Census Bureau Website www.census.gov)

As far as the countries of the developed world represented by the United Kingdom and United States of America in TABLE-1 are concerned, it is quite obvious that they practically had already derived any possible demographic dividend in as much as the proportion of working age groups started stagnating in them beyond 2005 itself and exhibits a continuous decline after 2010.

On closer examination, however, we find that even in the case of developing economies like India reaping a 'demographic dividend' is not a matter of foregone conclusion in as much as there are a number of conditionalities attached to a potential benefit fructifying or materialising in actual practice.

For instance, in the case of Indian economy, as the population is gradually titling in favour of younger age groups to such an extent that the average age of population is expected to be 29 years by the year 2020, there is no denying the fact that a *demographic dividend* is likely to accrue in terms of a reduced *burden of dependency* and a higher *saving rate* by a relatively younger population belonging to the potentially working age group that will also contribute more to the generation of national income. It must however be conceded that such a potential 'demographic dividend' can be effectively reaped if and only if the potentially working age groups are imparted with requisite skills and training to get productive employment and there shall be sufficient employment opportunities in the economy. For, to the extent the potential contributors to saving and national income belonging to the younger and working age groups fail to get gainful employment or remain *underemployed* and *disguisedly unemployed* with negligible marginal productivity, their growth generating capacity will be curtailed thereby putting a serious question mark on the feasibility or viability of a demographic dividend in the concerned economy.

Given the high incidence of unemployment and underemployment prevalent in developing countries such as India coupled with poor *skill formation* and inadequate thrust on *human resource development* in their economies, such a possibility whereby a potential demographic dividend may not be fully realised or reaped is neither remote nor ruled out!

The fact of the matter is that there typically is such a backlog of unemployed from the potentially working age groups of the labour force in these economies that merely adding more economic agents to that group cannot be reasonably considered as a *sufficient condition* for availing of any possible demographic dividend. In this connection, James (2008) observes that there is near universal agreement that there is nothing automatic about the links between demographic change and economic growth.

Further, it must also be realised that the relatively younger workforce at present will eventually grow old and apart from a decline in birth rates, the process of economic development is invariably associated with a fall in mortality rates too. This clearly suggests that any possible 'demographic dividend' is at best a 'transient phenomenon' which is likely to wither away in due course. In view of this, it becomes essential to identify the conditions under which a 'demographic dividend' can be effectively reaped by a developing economy like India in time before it disappears or withers away on its own due to its very transient nature.

How to Ensure that Potential Benefits of a 'Demographic Dividend' are Fully Reaped?

As is clear from the discussion of preceding section that some developing countries including India at the present juncture of their demographic transition have come across an opportunity to derive a possible 'demographic dividend' in terms of a higher proportion of younger and potentially working age groups in their population who could contribute more to saving and generation of national product thereby bringing about a higher level of economic growth and development. But as is also clear from the previous section that the existence of a potential *demographic dividend* is neither a matter of foregone conclusion nor complacency on the part of such developing countries. For, the underlying economic environment prevalent in their economies is not conducive to the fuller exploitation of any dividend arising out of demographic trends due to the existence of large scale unemployment and underemployment coupled with poor human resource development.

In this context, Basu and Basu (2014) caution that in case suitable employment opportunities are not provided in time to the potentially working age groups, the concerned economies could quite conceivably end up having a 'youth bulge' or a 'demographic disaster' instead of deriving any 'demographic dividend'. Likewise, with reference to the case of Indian economy, Misra and Suresh (2014) contend that employment intensive growth is crucial for meeting the demographic dividend challenge. Using a similar line of reasoning, the 'Economic Survey 2012-13' released by the Ministry of Finance, Government of India (2013) had advanced the perspective of growth pessimists by pointing out the significance of creating productive jobs with a view to effectively seizing the demographic dividend in the case of Indian economy.

Given the transient nature of such a 'demographic dividend' as highlighted in the preceding section, the developing countries like India must address these issues on an urgent basis so as to be in a position to derive demographic dividend in time and reap all its potential benefits to promote growth, development and prosperity of the public at large. Towards this end, the first priority area shall be to lay due emphasis on promoting education and training among potential workforce especially vocational education so that at a reasonably early age the economic agents acquire practical skills for getting gainful employment.

Side-by-side, it is also essential to expand employment opportunities in the economy through various officially sponsored programmes of the State such as public work projects and employment-guarantee schemes. For the smooth conduct of these schemes

and welfare-oriented programmes of the government, it is imperative to lay due emphasis on their proper implementation and root out any possible inefficiency, red-tape, corruption or leakages in this respect.

Still another public policy that can be reasonably expected to go a long way in ensuring fully reaping all potential gains of a demographic dividend on the part of the State is to provide liberal, concessional and timely financial assistance to small and marginal farmers, artisans, village & cottage industries, small-scale industries, budding entrepreneurs and the like especially from rural areas so as to promote 'self-employment' in the economy.

If and only if the developing countries like India would pay adequate attention to the aforementioned aspects concerning human resource development and employment generation, would they be in a position to fully reap all the potential benefits of a 'demographic dividend' in their economies in the coming future before it withers away due to its transient nature.

CONCLUSION

The link between demography and development has in recent years come to the fore due to the possibility of a 'demographic dividend' that some developing economies including India could potentially derive at their present stage of demographic transition on account of their population getting tilted in favour of relatively younger and working age groups. As these younger age groups can save more and contribute more to the flow of national income, the resulting increase in investment and productive capacity of the economy is likely to go a long way in bringing about economic growth, development and prosperity in the concerned economies.

This however is only a possibility that may not fructify in case the concerned economies do not pay adequate attention to imparting the requisite skills & training on the young and potentially working age groups so as to get meaningful and gainful employment. Such a strategy of 'human resource development' shall be supplemented by sufficient promotion of 'self-employment' in the economy coupled with effective conduct of public works programmes and officially sponsored employment guarantee schemes. It is only through a multiplicity of such mutually reinforcing and optimal set of policies that developing countries like India at their present juncture of demographic transition will be successful in fully availing of and reaping all possible gains of a 'demographic

dividend' in the coming future well in time before it withers away as by its very nature, it is a transient phenomenon.

In addition to deriving a demographic dividend, however, the developing countries in general and India in particular shall try to put a check on their birth rates so as to effectively move towards the third and final stage of demographic transition signifying the attainment of the stage of being a developed economy. The best way to achieve this is to try to control high fertility rates by paying requisite attention to the *correlates of declining fertility* and accordingly lowering infant mortality rates, promoting urbanisation and encouraging female participation in the workforce. But looking at the complex dynamics whereby demography and development impinge on each other especially in the case of developing world, a major breakthrough in controlling fertility rates in developing countries like India can come about *via* the provision of social security for old age from the side of the government in the form of social safety schemes such as old-age pensions. Once this is accomplished, poor households and those working in the informal & unorganised sectors would stop looking forward to their progeny as an *instrumental value* or means of providing financial support in their old age thereby reducing their incentive to have larger families.

In this way, just like the case of developed countries, the population of even the less developed and developing countries can be effectively utilised to serve as human resources as also human capital instead of acting or posing as a major impediment to the process of economic growth and development.

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