

# Education, training and innovation in the National Development Plan 2030

At the end of each year, many of us make resolutions for the year ahead. We will eat more healthily, join a gym (or attend more frequently), contribute more to our pension fund, be more diligent at work. As the new year rolls in, the challenges we face are those of turning the resolutions into practices and, once that has been accomplished, sustaining the good intentions throughout the year – and the years ahead.

In his New Year's message to South Africa, President Jacob Zuma had this to say about the National Development Plan:

*We have a long road to travel to prosperity. And we have a plan to get us to that destination – the comprehensive National Development Plan. The plan outlines the type of society we should be in 2030, where all will have water, electricity, good health, libraries, good schools, roads, good hospitals and clinics, safety and security, recreational facilities, a growing economy and jobs. Government alone cannot build that type of society, but will need to work with people from all walks of life to find solutions.*

A careful analysis of what the Plan requires reveals that those who work in the 'walks of life' that include education, training and innovation will play essential roles in the achievement of almost all the goals set out in the Plan. And the challenges in relation to the President's resolutions regarding the National Plan are the same as our own: how will we make this happen? And how will we keep the good intentions and far-reaching Plan come alive in deeds more than just in words?

The importance of the Plan, as the only major document referred to in the President's speech (apart from the 2011 Census), is underscored by two other considerations: Planning Commission Chair Trevor Manuel's resignation from active politics in order to drive and support the Plan's implementation, and the emergence of the National Planning Commission's Deputy Chair, Cyril Ramaphosa, as the Deputy President of the ANC and most likely the country's Deputy President after the elections in 2014.

Although education, training and innovation occupy less than 8% of the document, this proportion may not reflect the depth and consistency of the discussions on these issues. It was widely agreed by the members of the Commission that the aims of the Plan to achieve overall growth, development and freedom, will depend to a very large degree on what these three areas are able to offer. Sadly, these discussions do not emerge in the Plan itself. Yet these sectors are the initiators of implementation and the engines for sustaining the development process. The Plan includes 14 objectives and 16 actions relating to education, training and innovation. The objectives are wide ranging. They include improving early childhood development and school performance levels, expanding the college system, producing over 30 000 artisans a year, producing "well over" 5000 doctoral graduates a year by 2030 (the present number is about 1400), and "expanding science, technology and

innovation outputs by increasing research and development spending by government" and industry.

We start, however, with a school system that is still weak. Only 36% of Grade 12 students who write maths pass with a mark above 40%, while the proportion that pass with a mark over 50% falls into single digits. The system is also highly unequal. Nearly 75% of the schools in the top quintile achieve pass rates close to 100%, while in many rural areas of South Africa pass rates are closer to 50% or 60%. Levels of quality are questionable and will remain so while it is possible to obtain a National Senior Certificate with qualifying marks of 30% or 40% in a number of subjects. The dismal competencies that students achieve in science, mathematics and language, have to be vastly improved as they will be critical for future development. As long as these and similar challenges remain unresolved, many of the objectives set for education, training and innovation will be difficult to attain. The challenge is greater for the fact that 35% of children who enroll in Grade 1 do not make it through to Grade 12, with 50% of Grade 10 learners dropping out before writing the National Senior Certificate examinations. The result is that almost 50% (3.2 million) of the 18–24 year olds in South Africa are not in employment, education or training. Doing no more than turning resolutions into practices will be difficult. Moving into the stage of sustaining change and moving forward will be an immense task.

Yet this part of the Plan cannot be allowed to fail. Should that happen, the foundations for technology and growth will remain insecure, and the rest of the ambitious plan will collapse. The National Plan, however, is coy when it comes to addressing and foregrounding this obvious and inevitable reality. And this coyness could turn out to be a major weakness.

And here is why. Almost nothing in the Plan can be achieved without high-quality education, training, research and innovation. In the case of health, for instance, one of the primary objectives to be achieved is an increase in male and female life expectancy at birth to 70 years – a task that involves a complex set of contributions from a wide spectrum of health-care specialists, engineers, agriculturalists and social workers, to name just a few. Without people to provide these services (educated and trained in universities and colleges), and without serious, intensive research and appropriate innovation, the changes needed will almost certainly not happen. Similarly, in the case of the section of the Plan that deals with environmental sustainability and resilience, the starting objectives are indicators for natural resources, and the publication of annual reports on identified resources to inform policy formulation. In the Plan's section that deals with transforming human settlements the objectives start with strong and efficient spatial planning systems and the upgrading of all informal settlements; while in the area of social protection, addressing the skills deficits in the social-work sector is a key objective. Once again, education, skills, research and innovation must be the platform for the realisation of each of these objectives.

The National Development Plan's slogan is "Our Future – Make it work". Perhaps a prior slogan should be "Our Education – Make it work".



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