



Today's world presents challenges for all kinds of activities and knowledge. Developed technologies and techniques give an unprecedented boost to human growth; and have also imposed changes in lifestyle for the bulk of the population worldwide, in different ways towards ensuring a responsible and dignified development.

In 1972 with United Nations Stockholm Summit, was revealed for the first-time concern about the effects and responsibilities of the human being as a builder of their own environment. In 1987 with the document "Our Common Future" product of the first meeting of the "World Commission on Environment and Development", the concept of sustainable development was defined: "*satisfying the needs of the present without compromising the ability of future generations to meet their own needs*"¹. In 1992 with the Earth Summit in Rio de Janeiro, "The Rio Declaration on Environment and Development", describes the importance of technological exchange and research; and was enacted the need to overcome poverty as a fundamental requirement for sustainable development, and the importance of environmental protection in every aspect of any country development.

The features of environmental responsibility implicit in sustainable development can go unnoticed in important development spectra as the economy and social realities. With United Nations Johannesburg Summit in 2002 became visible the social spectrum of sustainable development, "*The summit recognized that the basis for achieving sustainable development passed by solving the problem of poverty and reduce the gap between rich and poor*"². In the same way and in accordance with the evolution concept, UN established as pillars of sustainable development: economic development, environmental conservation, and social equity.

The Civil Engineering as a generator discipline of knowledge and solutions in many fields of human interest (housing, basic sanitation, risk management and territory), has great influence on the development and impact on various sectors of human environment; not only direct impacts on the ecological aspects, but also in areas such economy, politics, and even the social structure of a nation.

According to the International Labor Organization in the report "The construction industry in the twenty-first century: its image, employment prospects and needs grading" the construction industry in developing countries is an important sector that provides and creates jobs and employment opportunities for a large proportion of vulnerable population while "*has the ability to absorb the excluded, provides employment for those with little education or skill, many of them from the more layers poorest in society*"³, also in developed countries has a dynamic growth and is an important percentage of the

¹NACIONES UNIDAS. Desarrollo sostenible: antecedentes [en línea]: Colombia. [fecha de consulta: 20 de agosto de 2015]. Disponible en: <http://www.un.org/es/ga/president/65/issues/sustdev.shtml>

²ÁNGEL VEGA, José Luis. Responsabilidad social y los principios del desarrollo sostenible como fundamentos teóricos de la información social de la empresa. ESIC. España. 2009. Página 105, Evolución del concepto de desarrollo sostenible.

³ORGANIZACION INTERNACIONAL Del TRABAJO, programa de actividades sectoriales. La industria de la construcción en el siglo XXI: su imagen, perspectivas de empleo y necesidades en materia de calificaciones. [en línea]: Colom-



investment making it an important sector of the industry.

At the Millennium Summit held in New York in 2000, the Millennium Declaration⁴ was signed. Based on this the millennium goals are formulated:

- ✓ Halve Poverty
- ✓ Achieve universal primary education
- ✓ Promote gender equality
- ✓ Reduce child mortality
- ✓ Improve maternal health
- ✓ Combat HIV / AIDS, malaria, and other diseases
- ✓ Ensure environmental sustainability
- ✓ Promote a world association for development

These eight goals, grouped 18 targets and about 40 indicators. They were drawn in 2000, with the goal to be achieved by 2015. They were conceived as common objectives of all nations and the great goal framing others was to reduce poverty.

It is evident that the various fields of Civil Engineering play a decisive role in meeting the Millennium Development Goals, this becomes evident when the UN says about housing⁵, that improving the quality of life of the inhabitants of the slum involves more than a physical improvement of housing, access to economic, social and environmental conditions. These conditions for improving the quality of life of marginalized populations may be associated with urban planning and improvement, investment in urban equipment, among others. According to the UN program for human settlements⁶, in 2000, about 940 million people lived in precarious housing; about 13% of these people were in Latin America. According to the same report, these areas were characterized by dilapidated housing in the center of the village and informal housing in the periphery and risk areas with

bia. [fecha de consulta: 24 de Agosto de 2015]. Disponible en: <http://www.ilo.org/public/spanish/standards/relm/gb/docs/gb283/pdf/tmcitr.pdf>

⁴PROGRAMA DE DESARROLLO PARA LAS NACIONES UNIDAS EN COLOMBIA. Objetivos del milenio ¿que son los ODM? [en línea]: Colombia. [fecha de consulta: 13 de julio de 2015]. Disponible en: <http://www.pnud.org.co/sitio.shtml?apc=h-a-1--&s=a&m=a&e=A&c=02010#.VaUQfl-qgkq>

⁵NACIONES UNIDAS. Objetivos del desarrollo del milenio: una mirada desde América Latina y el Caribe. 2005. Garantizar la sostenibilidad del medio ambiente. Página 179.

⁶POGRAMA DE LAS NACIONES UNIDAS PARA LOS ASENTAMIENTOS HUMANOS (NACIONES UNIDAS-HÁBITAT), citado por NACIONES UNIDAS. Objetivos del desarrollo del milenio: una mirada desde América Latina y el Caribe. 2005. Panorama regional del Medio ambiente construido. Página 192.



inadequate access to basic services. The precariousness of housing is determined, according to the UN⁷, in five indicators:

- ✓ Access to improved water
- ✓ Access to improved sanitation
- ✓ Sufficient area to live
- ✓ Housing durability of
- ✓ Tenure Security (state protection against forced evictions)

Civil Engineering responsible for giving answers to problems as social housing, basic sanitation, and urban planning, among others; has great importance in improving the realities of our country.

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⁷UN-HABITAT. Global Report On Human Settlements 2003: Slums of the World: The face of urban poverty in the new millennium citado por ÁLVAREZ de ANDRÉS, Eva. Análisis de la situación actual de la habitabilidad precaria en el mundo y alcance de los Objetivos de Desarrollo del Milenio [en línea]: España. [fecha de consulta: 14 de julio de 2015]. Disponible en: www.2015ymas.org/documentos_ver.asp?id=41