

٥١٠ (جغر) طرق البحث

الجغرافي

الفصل الأول ١٤٤٣ هـ

د. عنبرة السعود

الموضوع الثاني: ملخص البحث

الاثنين: ٠٦ / صفر ١٤٤٣ هـ

المواضيع

١. التعريف.

٢. المحتويات

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٤. الوظيفة.

٥. نماذج.

خامساً نماذج



Grey-Water Treatment and Reuse: A Review

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Abstract - Globalization as well as Rapid industrialization had made an evil impact and led to the over usage of water, since it has been raised drastically in the last decade. This increase in water demand has led to a situation at which humans find difficulty in availing the water for their needs. There has been a great technological research been conducted on waste water recycling methods. Grey-water is a form of waste water, consisting of kitchen water, bathrooms, dish and cloth washers. Reusing of Grey-water has become a better choice, but since the amount of dissolved contents are unknown, it is mandatory to recycle before reuse. Since Grey-water is less in organic and BOD content and free from faecal matter for reproduction of bacteria, it could be recycled easily by adapting various techniques. The recycled water may be used for many regenerative purposes, say irrigating the agricultural lands, toilet flushings, home garden watering, etc. this paper aims in revolving the possible techniques that can be utilized for recycling the grey-water.

Keywords: Grey-Water Recycling, Waste Water Control, Reuse Techniques, Water Scarcity, Urbanization, Treatment Technologies, Water Sustainability

grey-water can be used for recycling purposes, since it does not have any fecal matter for reproduction of bacteria. Hence can be recycled and utilized for other regenerative purposes, other than potable uses. If the waste water in the form of grey-water is recycled in a proper manner, it could lead to the elimination of the use of potable water of about 70 Liters per person per day. Since the potable water is reduced, according to a survey carried out by Aarhas University [6], it is estimated that by the year 2020, around 30-40% of the world nations will face water deficit and researchers have also expressed that climatic changes also worsen the situation. Surveys states that usable domestic Grey-Water could meet up to 35% of the demand for water for various non-potable uses. Fig.1 clearly depicts the major two types of sources for Grey-Water.

In the near future, the most costliest thing will be the Water and as per the prediction, it is stated that Third World War may arise due to water shortage. There are huge gallons of water in the Ocean and yet it cannot be directly consumed



Study towards Waste Water Management – Grey water Reuse

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Abstract:

For any living being water air, food, shelter etc. are the primary needs, for which water has the greatest importance. Pindar said “Best of all things is water”. In ancient times every individual or family was responsible to arrange for their water supplies. There were no collective efforts but with time urbanisation came into picture and thus the collective efforts for provision of water started. But this urbanisation caused a serious problem of resource exhaustion like water. Thus it is of prime importance to manage water resources in best way so that future generation could survive. Two immediate responses to counter this challenge are efficient allocation of the scarce resources, and development and use of alternative sources of water. While ‘water markets’ are seen as a means to achieve efficient allocation of the scarce resources, treated wastewater and low-quality water are now considered as potential sources of water to supplement the freshwater supplies. The latter option that is use of reclaimed water as an alternative, with a successful and well planned reuse scheme can help achieve sustainability of water resources around the world. Wastewater reuse has been proven to ameliorate the pressure on the water environment and prevent water pollution. Greywater is one such type of wastewater generated from domestic activities such as laundry, dishwashing, and bathing which can be recycled on-site for uses such as landscape irrigation, flushing and constructed wetlands. The aim of this paper is to assess the role of greywater reuse in sustainable water management in urban regions. This paper also describes various approaches to recycle and reuse of greywater.

Keywords: waste water, environment, quality, treatment

Tourism Development Effect On Saudi Economic Diversification ♦

Abstract

Investment in the tourism sector is a promising solution for two essential Saudi economic problems; less diversified economy and higher rate of unemployment. To estimate the effect of the tourism sector on output, income, and employment, Leontief's input-output analysis (I-O) is carried out. This paper found that increasing investment in the Saudi tourism sector can have a significant influence on solving these two problems. The tourism industry can have positive direct and indirect economic effects. The direct effect mostly comes from tourism activities. Other sectors of production such as services, construction, and manufacturing bring about the indirect economic effect. In sum, increasing investment in the tourism sector as an approach to enhancing Saudi economic diversification is entirely in line with the Vision 2030 objectives.

هل استوفت النماذج السابقة شروط كتابة الملخص؟

■ ج/ لا لم تستوف؛ حيث افتقدت إلى المحتويات التالية:

- هدف البحث؛

- أسلوب الدراسة وأدواتها؛

- أهم النتائج.