

area of 100-120 million hectares, or 10-12 percent of its territory.<sup>70</sup> Yet these figures are questionable due to a history of false afforestation claims both with respect to total acreage and the survival rate of new plantings. More important than the absolute figures for forestry areas (which do not take into account differences in phytomass), is that wood harvests are above the sustainable rate. It has been estimated that commercial timber and wood for heating and cooking in rural areas are being harvested at a rate of nearly 40 per cent greater than new stock is grown. During the 1980s, it has been estimated that such over harvesting resulted in a loss of forest of nearly 13 million hectares.<sup>71</sup> The low combustion efficiency of rural stoves and inefficient mill operations have contributed to the demand for wood.

Two other nonagricultural ecological systems have also been subject to abuse. Degradation of grasslands, such as by overgrazing and improper use for grain production, has been a significant cause of desertification and soil erosion. Erosion has several negative effects, including reducing the soil's organic matter, removing nutrients, diminishing water-retention capacity and reducing plant rooting depth.<sup>72</sup> The Chinese tend to view wetlands as wasteland, and China's coastal wetlands are under relentless pressure. This pressure stems from urban development as well as the desire to convert wetlands into arable land for agricultural production.

Table 1 summarizes the major causes and consequences of environmental stress on natural ecosystems.

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<sup>70</sup>China's Ministry of Forestry officials put total forest area at 131 million hectares in 1992. World Resources Institute, World Resources 1994-95, p. 79.

<sup>71</sup>Vaclav Smil, China's Environmental Crisis: An Inquiry into the Limits of National Development, Armonk: M.E. Sharpe, 1993, p. 63.

<sup>72</sup>Vaclav Smil, Global Ecology: Environmental Change and Social Flexibility, London; Routledge, 1993, p.71.