Modern irrigation technics, Maliki, Afghanistan, 1991. *A. Donini*

stretches of the river, including reaches used for recreation and the habitat of endangered species. They may also be dangerous; about twenty major dams collapse somewhere in the world each decade. In more densely populated countries, such as in Europe, it is difficult to find space for the large storage required and this solution has found less favour. In place of a large reservoir on the main stem of the river, the use of several smaller storages on tributaries is often advocated. There may be cost advantages in this approach and the different reservoirs may be built one after the other, on the instalment plan, making financing easier. There are hydraulic advantages in that floods would be caught nearer the source, but on the other hand any floods due to rainfall downstream of the tributary reservoir would not be controlled. An extreme version of this approach that is often advocated is to use a very large number of cheap structures in the headwaters that could also provide farm water storage for stock watering or small irrigation purposes. These "farm dams" are commonly used in many parts of the world at the extreme upper end of tributaries, even before a real stream has developed, and provide water storage for the farm and impede direct runoff, which helps to reduce floods at source. The number of dams required for effective flood control would be large and similar storages would need to be provided in non-farm areas, such as forests. The idea is hydrologically attractive as excess runoff would be controlled at source, but there is as yet little experience in the large-scale use of many small storages for flood control.